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FIGURE 268

GAATCTGTTTCCAAAAAAAAAAGCTTTAAGAAGTCTTTAGATTTACAGNTAAGCATATTCTAA
ATACTATGTGATGAATTATTTCTCTTATGTTAAAAAAATATTAATTTGGACCCAANTATGAC
TGTGGGTATTCTGCCCAGGGAAGAAGAGCTAGGAGGTTTAAACCTTACCTTGGANTTGCTGCT
TTGTTTTCTATGCCTTCTTGACAGAAGGATTTATTTCACTTCCGAAATATTAGCCATAATGCCC

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FIGURE 269

CACTAGGAAAAATTGAAATNCTATTGGAAATTNTTTTGGCCACAAAGGTAAATAGGTNTACCA
GGGGAAACAGGCATCAAGAAAATTGCCCCAATTTTAAAACAATAGGGTTATTTGAGTAGTTG
AGTTTAAGAAATGAAAACCACAAATTTTGGTGGAACCTAAACACCACAGTCTATTTGTGTGTA
ATTTCTCAGGNTTTATTATAGTTCATGATAAAATCAATTTTCCATGTCTANTTTGTTTTTCTT
CAACAAGTGATCTATCTTTTACAAAAGGGAATATTTTGCTGGAGAAATGCTCATTGTTTCCCT
TCTGTATGTCTTTGAGGGTAATGCTAAAAGCAAGCTCAAATTTCAAATATGTTATTTTAAA
ATATTTTATATAGGATTTGTTAAANTTATAGTTTTCAAGGATTGTCTTTTGTTCCTTGGATT
CTGATTAAGTGATTTTAAATGTATTCCTTTAAAAATATTTATTGGCACATTGTATTTGTACAT
ATTGATGGGATAAAATTGATGCTTCTGTACATATATATTTGGCATAATCATCAAATTTGGGTA
TTTAGCTTATTCATCACCTCATTCAATTTATCATTTCTTTATGGTGAGAACATTCAAAGTCTC
TCTTCCAGCTATTTTATAATATATTATAC

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FIGURE 270

TTCGGAAGAAGCACCTCAGAGGGATTAAGCTCCTGAGAATGTTACCTGCANTATACCTGATGG
CGTGCCAATAGATATCACAGTGAAGTTGATGGTCTTCCCTTGNACATNTCAACATTNTTGAAC
CACTTAATCCTCTNTTGACAACACTAGTAGAACAGAATCCTGAAGATATGGGAGACCTATACC
TAGATGTTGCTGAAGCTTTTCTGGATGTTGGTGAATATAATTCTGCACTTCCCCTCCTCAGTG
CTCTTGTTTGCTCTGAAAGATACAACCTTGCAGTAGTTTGGCTTCGTCATGCAGAATGTTTAA
AGGCCTTAGGCTATATGGAGCGAGCTGCTGAAAGCTATGGCAAGGTGGTTGATCTGGCCCCAN
TCCATTTGGATGCAAGGATTTCACTTTCTACCCTTCAGCAGCAGCTGGGCCAGCCTGAGAAAG
CTCTGGAAGCTCTGGAACCAATGTATGATCCAGATACTTTAGCACAGGATGCAAATGCTGCAC
AGCAGGAANTGAAGTTATTGCTTCATCGTTCTACTCTGTTGTTTTACAAGGCAAAATGTATG
GTTATGTGGATACCTTACTTACTATGTTAGCCATGCTTTTAAAGGTAGCAATGAATCGAGC

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FIGURE 271

TGGTTTTTGCCCCATAAATTCCTCAGCTTGAGCAGTTTGTTAAGGAATGAGGTTACAGATTC
AGGAATTNTAGGNCCTCAACCTNTAGANTTTGTCCCAAATGTTCTCCGACATGCAGTAGATGG
GAGACAAGAGGAGATTCTGTGGTCATCGCTGCATNTGAAGACAGGCTTGGGGGGGCCATTGC
AGCTATAAACAGCATTTCAGCACAACTCGNTCCAATGTGATTTTCTACATTGTTACTCTCAA
CAATACAGCAGACCATNTCCGGTCCTGGNTCAACAGTGATTCCCTGAAAAGCATCAGATACAA
AATTGTCAATTTTGACCCTAAACTTTTGGAAGGAAAAGTAAAGGAGGATCCTGACCAGGGGGA
ATCCATGAAACCTTTAACCTTTGCAAGGTTCTACTTGCCAATTCTGGTTCCCAGCGCAAAGAA
GGCCATATACATGGATGATGATGTAATTGTGCAAGGTGATATTCTTGCCCTTTACAATACAGC
ACTGAAGCCAGGACATGCAGCTGCATTTTCAGAAGATTGTGATTCAGCCTCTACTAAAGTTGT
CATCCGTGGAGCAGGAAA

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FIGURE 272

CCGGAAACCATGAGGTAATGCCNCAATGGCATATTGTAAATGTCATTTTAAACATTGGTAGGC
CTTGGACATGATGCTGNATTACNTCTCTTTAAAATGACACCCTTCCTTCGCCTGTTGGTGCTG
GCCCTTGGGGAGCTGGAGCCCAGCATGCTGGGGAGTGCGGTCAGCTCCACACAGTAGTCCCCA
CGTGGCCCACTCCCGGGCCCAGGCTGCTTTCCGTGTCTTCAGTTCTGTCCAAGCCATCAGCTC
CTTGGGACTGATGAACAGAGTCAGAAGCCCAAAGGAATTGCACTGTGGCAGCATCAGACGTAC
TCGTCATAAGTGAGAGGCGTGTTGACTGATTGACCCAGCGCTTTGGAAATAAATGGCAGTG
CTTTGTTCACTTAAAGGGACCAAGCTAAATTTGTATTGGTTCATGTAGTGAAGTCAAACGTGTT
ATTCAGAGATGTTTAATGCATATTTAACTTATTTAATGTATTTTCATCTCATGTTTTCTTATTG
TCACAAGAGTACAGTTAATGCTGCGTGCTGCTGAACTCTGTTGGGTGAACTGGTATTGCTGCT
GGAGGGCTGTGGGCTCCTCTGTCTCTGGAGAGTCTGGTCATGTGGAGGG

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FIGURE 273

TGAAGTTGAATTGAATGATATGAGGNTTTTCTTTCCCAAGGTCNACCAGGACCAAGATTNTTT
TATAGTTATAAGCCTTGAAAGAAATTCTTGCAAGGTGTTGGACNCTTACTNAAGCAGAGAAGA
TGTCTTTTGAAACTCAGAAACGAACCTTGGTACAGAAAATCAGTATTTAAGGCCCAGAACTTA
TTGAAAGCGCAATGTACTTCTACCGTGCCACGGGGGATCCCACCNTCCTAGAACTCGGAAGAG
ATGCTGTGGAATCCATTGAAAAAATCAGCAAGGTGGAGTGCGGATTTGCAACAATCAAAGATC
TGCGAGACCACAAGCTGGACAACCGCATGGAGTCGTTCTTCCTGGCCGAGACTGTGAAATACC
TCTACCTCCTGTTTGACCCAACCAACTTCATCCACAACAATGGGTCCACCTTCGACGCGGTGA
TCACCCCTATGGGGAGTGCACTCCTGGGGGCTGGGGGGTACATCTTCAACACAGAAGCTCACC
CCATCGACCCTGCCGCCCTGCACTGCTGCCAGAGGCTGAAGGAAGAGCAGTGGGAGGTGGAGG
ACTTGATGAGGGAATTCTACTCTCTCAAACGGAGCAGGTGCGAAATTTAGAAAAACACTGTTA
GTTCTGGG

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FIGURE 274

TATGGGCATAGAAAACCCCTGGAAAGNCCCATCCACCATTATATATAGAGTGATTGTCTNTGCT
TGNTGAGCTAACAGGGGTGTCAAGCTTCCATTTTGGTATCTACTTCTAAATACACTCAGACCA
GGAGAAATTTGGACTAATTTTCAAACACTACAGACACTTTCTAATCATGATGCATTTCAAAGTG
GACTCGAATTAACTGAGTTGCAAAACATGACAGTGCCCGAGGATGATAACATTAGCAATGACT
CCAATGATTTTACCGAAGTAGAAAATGGTCAGATAAATAGCAAGTTTATTTCTGATCGTGAAA
GTAGAAGAAGTCTCACAAACAGCCATTTGGAAAAAAGAAGTGTGATGAGTATATTCCAGGTA
CAACCTCCTTAGGCATGTCTGTTTTTAACCTAAGCAACGCCATTATGGGCAGTGGGATTTTGG
GACTCGCCTTTGCCCTGGCAAACACTGGAATCCTACTTTTTCTGGTACTTTTGACTTCAGTGA
CATTGCTGTCTATATATTCAATAAACCTCCTATTGATCTGTTCAAAGAAACAGGCTGCATGG
TGTATGAAAAGCTGGGGGAACAAGTCTTTGGCACCACAGGGAAGTTCGTAATCTTTGGAGCCA
CCTCTCTACAGAACACTGGAGCAATGCTGAGCTACCTCTTCATCGTAAAAAATGAACTACCCCT
CTGC

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FIGURE 275

TGGGACACGGGTTACCCCAAGNGCAGCGCTGGCAAGGCCTTCATGATNTCGGTGTGCTCTACG
TGACCAATTCCCACCTGGNTGGGGCAAGGTCTACTTCGCCTATTTTACCAACACGTCCAGTTA
GAGTACACGNACGTGCCCTTCCACAACCAGTATTTCCACATCTCGATGCTGGATTACAACCCC
CGGGAGCGCGCCCTCTATACCTGGAACAACGGCCACCAGGTGCTCTACAATGTCACCCTGTTT
CACGTCATCAGCACCTCTGGGGACCCCTGAGCCAATGCTGTGGCTCGGGCTGCTGCCTGGGGG
GCCTCCGGGGGCTGGGGGCCCTTTTCATTCTGCCTGTGTCCCTCAAGGGTGATCTCTCTGTCT
CTGTCACGCCCTTTCTCCCCGCCTTTTGTCTGGGCTTTTGTCTCTGCCTATGTATTTCTGTC
TATTTTTTCAATTTCCCCTCTTCTCCTTTATTGATCTCTGCTTTTAATACACCACTTCTTTCT
TTCTGCCTTTTTATGGATGTCTTTTCTTTTATGGCTCTGGTTCTCCAGTTCTTTCCGTCTC
TGCCTCTCTCTGTCTCTCTCTCTCTGTCCTTCCACCCCTCCCTCCTTGCCTCCC

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FIGURE 276

CGAANGCGTGGGTGTGCATCCGGGTGTNTGAAGGCTGTGCCCGTTTTGTTTCTTGGCTAAAAT
CGGGGGANTNAGGCGGGCCGGCNCGGCGCGACACCGGGCTCCGGAACCACTGCACGACGGGGN
TGGACTGACCTGAAAAAATGTCTGGATTTCTAGAGGGCTTGAGATGCTCAGAATGCATTGAC
TGGGGGGAAAAGCGCAATACTATTGCTTCCATTGCTGCTGGTGTACTATTTTTTACAGGCTGG
TGGATTATCATAGATGCAGCTGTTATTTATCCCACCATGAAAGATTTCAACCACTCATACCAT
GCCTGTGGTGTATAGCAACCATAGCCTTCCTAATGATTAATGCAGTATCGAATGGACAAGTC
CGAGGTGATAGTTACAGTGAAGGTTGTCTGGGTCAAACAGGTGCTCGCATTTGGCTTTTCGTT
GGTTTCATGTTGGCCTTTGGATCTCTGATTGCATCTATGTGGATTCTTTTGGAGGTTATGTT
GCTAAAGAAAAAGACATAGTATACCCTGGAATTGCTGTATTTTCCAGAATGCCTTCATCTTT
AAT

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FIGURE 277

AGTTTCCTTTAAATTGGGGTNGGGGTGTTAAGCNCTGAAAATATCTTTCNTGATTACTTTACC
ATGTGGACATATGGGATAAATACTGTATTTTCAGATTTACATAAAAGTAGATTAGTAATGCNCA
GCTTTCAGAATAAAAACTGATAAAAAAGACCAAGCACTATCAACTTTGGACAGTAATTTCTTA
GGTGTTAAACAAGTTTTCTGAATACAATCTGGATGCAAAACGGCCTGATTTGATGAATTCATA
ATTTTCTTCTGNANACTTTCATTTTATTAAATATTTTATTACTTGGTTAAACNCNAGAATTAT
CTATGTAACTTCATGGGNTTTTTTGGTTGAAAGTTAGATGTTTCAGTAACTAATTTCCCAGTTA
TGGCCCAGAATTAAACATTTATGATCATATTTTCAGAAGTCAAAATNCAAACTGGATTATCAA
AACGGTTGGTGTGGTCNCTTTAAACTGGACTATCAGTATGGTTGCCGTGGTCACTTTAANCGG
GATTATCAGTACGGTTGGTGTGGTCACTTTGGTTTATCATCAATACAGTTGGTGTGGTCACTT
TAAACTGGATTACCNATATGGTTGGTGTGGTCGCTTTAAAGTTTGNTTTCATTTTTTTCTATT
TTTAATTNTTAC

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FIGURE 278

TTGGTTTTTCTGTTCTGNGTTAGTTTGCTGACTTAAGAGGATACAGACTTGAGGTATAATTT
GTCTTAGTCAGTTTTGTGTTGCTATAACAGAATACCTGAGACTAGGTAATTTATAAAAATAAA
GTTTATTTGGCTCATGATTNTGGAGCTGGAAAGTCNAGATTGGGCAGCCCATATGATGAGGGT
TGCACACTTNTTCNATTTATGGCAGAAAGTGGAAANGGAAGCAGGTGTGTCCAAANAGACATG
CAGGAGAGGTTGGAGTCANTGCTCTCTCAGGAANTAATTCATTCTNTAGAGAGTGAGAACTCA
CTTAACNTTGCNAGAGGGCATTAACTCTATTCACCCATGAAACNAACACCCTNCAGTAGACTC
CACCATTTAACTGCCATATTGGGAATCAAATTTCAACATGAGTTTTGGCANGGG

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FIGURE 279

CCTTTGGAACTGGGATTAATGTATGCTCTAGATCCATTTATTAGAAATGCAAAAATACTACA
ATTTTTTGATGGATGAAAATACTCCTGTAAACACAAACAGAGAACTGGAGGAACTGAAGAATAA
CTCACTCATATAGNTCTGCCTCATTCTGTGTGTGTGTGTCATGTGTGTGTTANCAGAGGTATTT
TACTCAGAAAATAGGTTTCAAAGAACATTAATGACTTTCTTTCCCTTTTANGTNTGNTTAAT
CAGTTAACTGNTATGGGAAAAGTTTTATAGAACTATATAACCTGAATGTTGGTCTCTTTGNA
CACATNTTTTNTATGACTGC

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FIGURE 280

TGTGGTCCTAATATCATAGATCACTTTANATGTGATTTGTTTCAGTTGTTGACACTTGCCTGC
ACGGACACCCACATCCTGGGCCTTTTAGTTACCCTCAACAGTGGGATGATGTGTGTGGCCATC
TTTCTTATNTTAANTGNGTCCTACACGGTCATCCTANGCTCCCTGAAGTTTTACAGCTTTAAA
NGGCGGCACAAAGCCCTNTNTACCTGCAGNTNCCACCTCACGGTGGTTGTANTGTTCTTTGTCCC

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FIGURE 281

TGGTTCCAGGTCACCATCCTTAGCNTCAAATTCATAAAATGGTTGCTTCTACCTCCAGCCTGA
TATCCTTGTGATGGGCAGGCAGAACCAGGGCTNTAAGGAAAGGAGCCAGCACCTGTATCAAGA
AGCCAAAGCCTTCCCTGAAATCTTTAGCAGACGTCTGCTTGTGACTATTTGGCTAGAACTTTG
TGACATGGCCACTCCNTGCTGCAAGGACATTTACAGTTTTTCAGTTGGGCCCATTGCCACCCT
GAGCAAAGGGTCNATAAGGAAGAAGACGGAGAGTGGACATGTTGGGCATTACCTGCCAGCAC
TCCATCCAGACAGCCNCANAANTGGTGGGTAAACAGAGACAGCATAACATTCACTTATCAACTG
TTTAGTAAATTCCTGGCATGGGCA

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FIGURE 282

AGCCCAGATCCAGGAACCATTCCTATTTTCAGGATTTTGAATGCAAACTTACCTTNTTACTCT
AAAGATGAATGTCAGGGAGAGATTTATTCAACCCTGAGATTTTTGCAGTCTCCTTCAGAGTCA
CAGAATAGATTAAGGCCTGATGATACTCAAAGGCCTGGGAAAACATGATGNCAAAGAATTTTCA
GTGCCCTGGCACCTCATTGCAGTGACTNNTGGGATCCTCTGNTTACTTCTTCTGATGATAGTC
NCAGTGTTGGTGACAAATATCTTTCAGTGNATTCNAGAAAAACATCAACGGCAGGAAATTTTA
AGAACTGTAGTGAAAAGTACNTCATGCAAAATGNCNACTACTTAAANAGCAGATTTTGACA
AATAAGACTTTAAAATATGACGTTNTCAAAAATAGCTTTCAGCAGAAAAAGGAACTGGATTCA
CGCCTTATACNAAAGAACAGATGTCATAGAGAAAATGAGATCATTTTTAAAGTTTTGCAAAAT
ACAGGCAAATT

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FIGURE 283

AGGAATGACCTTCCTCAGGGGGCTGAGGATACCCACAGGCCTCCTTTCTCTCCAGCTCCAGG
GTTTGACTATGCACCTATTTAGGGGCTGCTTGCTCAAGGGAGAGAGGTACAGGAGGTGGTCTG
GGAAAAACAAAATTGATCTTCCTATCAATTGTATTTTTGTTTAGCGGAATCTATACACACCCA
TTTCTTTGGATATTATTTCCAGTTACTCCAGCTAATCCAAATAATGATATTTGCCCTCAGTTA
AGAACAGATTTTATTTTTAGGAACAGAAGTCTAGTAGCAGTTTTGCTTTTTATTAACGTTTTA
AGGAACATTTACCTTAGATATCATGATTCTTGGGCATTGCAAAATGCAGTCAATATCAAACA
GCAATGGTTGCTTGTTTTATGATCGGTCAGAATTTGTCCCTTATATTAATTTTCAG

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FIGURE 284

GCCCCGAGTTTCTGTCGCAGGTTGCGAGGAAAGGCCCTAGGCTGGGTCTGGGTGCTTGGCGG
CGGCGGCTTCCTCCCCGCTNGTCCCTCCCCGGGCCCAGAGGCACCTCGGCTTCAGTCATGCTGA
GCAGAGTATGGAAGCACCTGACTACGAAGTGCTATCCGTGCGAGAACAGCTATTCCACGAGAG
GATCCGCGAGTGTATTATATCAACACTTCTGTTTGCAACACTGTACATCCTCTGCCACATCTT
CCTGACCCGCTTCAAGAAGCCTGCTGAGTTCACCACAGTGGATGATGAAGATGCCACCGTCAA
CAAGATTGCGCTCGAGCTGTGCACCTTTACCCTGGCAATTGCCCTGGGTGCTGTCCTGCTCCT
GCCCTTCTCCATCATCAGCAATGAGGTGCTGCTCTCCCTGCCTCGGAACTACTACATCCAGTG
GCTCAACGGCTCCCTCATCCATGGCCTCTGGAACCTTGTTTTTCTCTTCTCCAAC

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FIGURE 285

ATTTAGATTTGNATCTCTTCCCATCAATCATGAATACATAAGGTAATATTTTATAGTTGGAAA
GCATTGCTTAATATATTGAATCAATAAAAATATTGATTTTCATATATTTAATTTTATAATCTT
TACAGATTACAATACTGTGATGAGACTGTTCCGTGAACTTTGGATCCACACACAGAATTTCTT
GGTCCTCAGAAGAAAACAGAACAAGTCCAAAGAGACATTGGATTTTGGTGTCCAAGGCATCTT
AAGACTTCTGGGGGACAAGGATATAAGTTTCTGGGAATTGACCAGTGTGCGCCTCCATGCCCC
AACATGTATTTTAAAAGTGATGAGCTAGAGTTTGCAAAAAGTTTATTGGAACAGTTTCAATA
TTTTGTCTTTGTGCAACTCTGTTACATTCCTTACTTTTTTAATTGATGTTAGAAGATTCAGA
TACCCAGAGAGACCAATTATATATTACTCTGTCTGTTACAGCATTGTATCTCTTATGTACTTC
ATTGGATTTTGTCTAGGCGATAGCACAGCCTGCAATAAGGCAGATGAGAAGCTAGAAGCTTGG

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FIGURE 286

CGTTAANACGAGCCTGCCAGTAAATGTAGCCATCATGTTTCAGTAANGGCCTTGCAAAACAGAT
TACCCCTTCACCTTTTCACTTAATTGTCTACCTATGAATCATTAAATGNTTGGTTTGNTTTTA
ATTCTGTGATAGGTAGGAAAGGATGGAACCTCCTGGCAGACTAGTGTTANAAAGTTTTNGAAG
CAGGGTGAGTCTTGTACCTTTGNGGTCCTGTNTCACAGACACCTGTNTANTCCCTGACCCTTT
TAAATGGTAACTTTNTGCCTGTAGGAAATCTTCCCTTTGTGCTTAGGTCTTTTTTCNTCTGTGA
GCTTTAGATAAACNACCTAGTGTTTAACTTTTAAATAAGGGATTCATTTTTTAANACATGAG
AATTCATTTCAAAANTTTGGNTTTAGNTATTTANTTTANTCTACNTGGNTCTTTTTTCAGACAG
ATGTTCTCTCCTGGATTGTAAAAGTCGAATTCAAAGGATTTTTANTTGNAATANACTTAACCT
TTCTCTTGTAAGNTGCCATNTGTGTANANACAGCTTTGANTGCCTGACAAGAGGAAAATGTTT
CCC

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FIGURE 287

AACTGTCTTTAATGGCCCAGTTTTACCAGGGCTTGTTGTNTAAGGACATTAAC TTGTGCTCCC
CTCAGGGATGGGTTTANTACTAGCTGTCAGAAAGCTATTGGGTATCCTAATGTGTTAATAGCT
GAAACTCAGCTGTAATTTCTCCTAAATACTTCAGCATTTTGCATTCTGTACANTGTGGTGCTT
TTTCCNCCTTGTANTGTTCTAACTGTAAGCTCCTAGGGGGCAGCAATTTGGATAAATCTTTTG
GTAAGTAGTTNTCAATAAAATATCTTCCCTCCCCATACCCCTACCCGAAATNTTATANTGNTC
TTTACAAAAC TTTGGTCAAGAGTAGAAATATATCCAGGCAGATGTATATGCCATACAATAGCA
AGAACAGTAAAGCCCCAACTAATGATTTTGAGTTTAAAAATAGAAGGCNATTAAAATGNACTC
AAAGTTACATTAAGAAAAGCTTTCACGGGGGTAAATATTGAAACAGTCACAAAGGTTAAGAAAA
TACTGATAGCAGTTTTTGTCTATTTTAACATTGTAGTCATTTGTACTTTGAT

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FIGURE 288

GGATTTTCGTAAGTAGTTTAGAGATAGTCACATTTTAAAAATTTAAGATCAAGCAAATGAAGC
TTATTTTANGTATTCATAGTATAAAAGACCTTCAGTAAATAGGTAATANTTTTGTTTTATTTC
TAGAAAACAGCTCCTTGAACACAGTGAGCTGGCTTTTCACACATTGCAGTTGTTAGTGTTTAC
TGCCCTTGCCATTTTAATTATGAGGNTAAAGATGTTTTTGACACCGCACATGTGTGTTATGGN
TTCCNTGATANGCTNTNGACAGCTNTTTGGCTGGNTTTTTNGCANAGTTNGTTTTGANAAGGT
TATCTTTGGCATTTTAACAGTGATGTCAATACAAGGTTATGCAAACCTCCGTAATCAATGGAG
CATAATAGGAGAATTTAATAATTTGCCTCAGGAAGAAGCTTTTACAGTGGATCAAATACAGTAC
CACATCAGATGCTGTNTTTGCAGGTGCCATGCCTACAATGGCAAGCATCAAGCTGTTTACACT
TNATCCCATTTGTGAATNATCCACATTACGAAGATGCAGACTTGAGGGGTNGGACAAAAATAGT
TTATTTTACATATAGTNGAAAATNTGC

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FIGURE 289

TCCCTTAATTCCATAGACCCCGAAGGGGGTTTCCCGGGTTGGAATCCATTAAATCCGGGGCCAG
GGCTTGNTCCCGTGGTTT TAGGATTGGGGGTTANAAATAAAAANTCAGGTNTATTTNTTACCAG
TCAGTACNATTTTAAAGAATGTACTTGGTATATAATATATGGACTTCAGGAAC TTTATTGGG
GTGGGGGGTTAATTTTGCCTTACCCTGTTCACTTTCANATGATTAGGCTTTTGCAC TTTAGAA
TGAGAAACTTGTGACGTTAGTGTGTTCTTACTAGCTTTAATTTGTANGTAGCAATGAATTGTG
AATCTTAGTGCAGTGGGTTTTTTTAAAAAACTCAAAAAGCTGGGAATTAAGTGGTTTCAGTAA
TAATGNTATACCGAGGTGCTTGCATTGTATTT CATAATTTTGNTACAAACCNAAATTATTTT
AATGAGAACAGTNTTGGGTT CANAGGTGTGATGCCAGAATGTATTTTCGTACTGTTAGGCCCT
TGGAACAGATATCGGTGCTTTTTGAAAGATGAAAGAAATGCNATGGGTGCTNTTCANGCAAGG
TTGCAAACCTACCAAGAATGCATAATAGTNTCACTTTTCCCCAATAAANAGATGNGTGTGACT
AGTTTGGACTTTTAACCTTAATGGGGGTTGCATGTNTCCTANTGTTAATCATTGTCAGCTGC
AGTGACATGATCCACAGTNC

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FIGURE 290

GACTTGGAAGAATTGGACCTAGTGGNTAGACCCAAGGNCCAAAGCCAANAATTCGTGGGGGGC
CCAGGAANCAGGAGGTCNCATGGGATTCCAGACATAAGATCAGGTTTTAACCCCTTTGGCCC
AAATTTTGGCTGAAAATGTTGAATTATCAACTCTGAAATTAAGAAAGTTTATATTAAAC
ANTGCAATTTTCCTTAGAATTTCTGTATATATTAACATCATGAATGATAAATTCTCTTCAATG
TGCANGTCAGGTTTTTGNACTTGNATATCAAATCTATCTGTGTGTATGAAGTGTATGTTTATT
GAAATACNAGATATTTAAGAAGCTGATNTGGAAAGTTGGATTTTCATTCTAGTTCCTAATTCC
CAGAGGNTTTTTTAAAGGAAGGGAATGTNTGTGGTACNCCAGTTGTCAGCTGGGTGGNTACTG
GATCATCTTTCTTTTATCAACNAGATNAACTATCAACTTCACCAGCATCATGAACCTTGNTGC
CGTAAAAAGGAGTTCACACTTCTGTTCNCTTTGAGTCTNTTCAAATGGATTNTGTGTCCTCC
TNTGGAGTNTGNGCCATTTANTGNTTNTGACTNTTCCNCTAAGCCAGAGAATGATGATGGAGG
AAATTATGAAATGTTACNCGAAAATTTGTTTTTCGACCTGAACTGTTTGANGTCAC

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FIGURE 291

AACCCATGGGGCCAAGTCAAAAGCCNCAGGTTNTCCAGGCAAGGGCATGGGCATGGGGTTAG
GANCAGTGAACCTGGAAGTAATCCCAGCCCTGCNGTCATTAGTGTGTTACCTCAGGTAAAGGG
GGGGAACCCTACAGGACTGTTACAAGGATTAAATGAAGGAATTTAAGTGTGTGCATGTATNTG
GCATGTAGAAAATACAGTGTGGTGGGGAGAGAACAGATTNTAGAACCAGACTGCCTGAGTTCA
AATCCCAGTTNTGCTGCTTCCTGGCTGTGTGACCCTGGGCAAATCACTTAGCCTGTNTGGGNT
TCAGATTTCTCATCTGACAATGAAGATAATNAAATACCTATCTTTATGGTTGTAGTAAGGATT
AAATGAATTGAAATAAAGNTTTTAGATTAATACTTGATATGCTACATAGGTGTCAGCCATTGT
TAATCANTGNTGTCATTATAGNTATTATCAACATGATTATTTGCTNTAANAGGAACTCAGGCA
TTTGCAGGGTGTGGGGAACCCTGAGCTGGGTNTCCCCTGTTGGGTGTTGTGTCCCATNATAC
CCTTAGGNCAACCCAGGTCAGGTCAGGGGGATGTGCCCTTNTTTTCCTGGNCCAGGTNTGTAA
GGCCANCAGCTTTGCCTCATACGTGNGCAGCAGGTNGTTATGG

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FIGURE 292

CTAACCCCAGTTGAATTTTTGGAGCTTGTTGGATTTGCCCATTTGCCAGCCCAANTATGTTGGG
GAAAAGTNTNTGAGTGTCAATTTGCNTGTTGAAGCTCTGGNTAATGTGATTATTGATCTGAGA
ATGAATCTTTNTTAGNTATTCCAACTTAGTTATTTTTGCAGTTTTGGTANTTTTTTCCTCAT
TGGAACTCCCAAAAATCCGATTGCTTTTGCGTGTTTTTTTATTTGCCTGATAACTGATCCTTT
CCTTGACATTTATTTTAGTGGACTTTCAGTAACTGAAAGATGGAAACCCTTTTTGNACCGTGG
AAGAATTTGCAGAAGACTTTCAGTCGTTTTTGCTGGAATGATTGAGCTTACATTTTTTATTCT
TTCCGCATTCAAACCTTAGAGACACTCACCTNTGGTATTTTGTAANACCTGGNTTTTCCATTTT
TGGAATTTTNTGGATGATTTGTCATANTATTTTTCTTTTAACTCTTTGGGGATTCCATACCNA
ATTAAATGACTGCCATAAAGTATATTTTACTCACAGGACAGATTACNATAGCCNTGATAGAAT
CATGGCATCCAAANGGATGCGCCATTTTTGNTTGATTTTCAAGCAGTTGGTGTTNTTTAGTNT
TNTTGCAACAGCGATTTTGGGAGCAGTTTNCCG

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FIGURE 293

TCCAGGATTTTCTCCCTGGTNTAAGGTCCTGGTTCACACCCANAGGAACCAGTTTGGTCCTG
GGCAAGCCACTGCCTATAGGATAAGGNAAGATCAAATAAATCATNTCAGGGAGAACAAGGNCC
AGCCTTCCTCCTCTATTCACTCAAACACACCACCCAAGCACCCANTTTGGCCAGACTCTGTGA
TGGTCCCTGCCCTCAAAGGACTGTTTCATGGTCTAGAGATGAAAGAGCCCAGTCAACAGTTATA
CTGTGTGGTGGCGGCGGGAGGGTAATCACAGGGTATTTATGGGTACAAAAAGGAGGCACCCTG
ACCTCACCAGAAATAGCTACCCTGTGCCATAGGCTNTAGGCAGACTTTACTGACATTGAANAN
CCTTTTGCAGNCAATTANCAAAAAGACTACATGTGTAAATGTGACAGAACAGGGATTTCAGAGC
CTGAATGTTTANGCCTGCTTTATCCTCATTTTGTCTGAGGAGGCAGAGGTGGGAAAATAA
GTNTAGAAGCCATNTGAGTNTGGGTGGGAGCCACCTNTATATTTGTCATAAGTCTCTGATGGT
CCTTTGGTTTCTAGCTATANCTGTGTCCACTAGTGC

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FIGURE 294

TTAAGGCCTTTTAAAATGGTGGAAATTTTGGNACAATTATNCGGAAATTTTAAATTTTAAAG
GAATTTTGGAAAGTAGTTTAAAGATAGCCCNTTTNNAAAATTNTAAGATCAAGCAAATNAAGC
TTATTTTAAAGGATTCAAAGNATAAAAGCCTTCAGTAAATAGGTAAAATTTTGGTTTATTNTA
GAAAACAGNTCCTTGACACAGTGAGTGGCTTTTCACACATTGCAGTTGTTAATGGTTTACTGC
CCTTGCCATTTTAAATTATGAGGCTAAAGATGTTTTTGACACCGCACATGTGTGTTATGGCTT
CCTTGATATGCTCTCGACAGCTCTTTGGCTGGCTTTTTTCGCAGAGTTCGTTTTGAGAAGGTTA
TCTTTGGCATTTTAACAGTGATGTCAATACAAGGTTATGCAAACCTCCGTAATCAATGGAGCA
TAATAGGAGAATTTAANAATTTGCCTCAGGAAAAACTTTTNCNAGTGGATCAAATNCAGTACC
ACATCAGATGCTGTCTTTGCAGGTGCCATGCCTACAATGGCAAGCATCAAGCTGTNTACACTT
CATCCCATTTGTGAATCATCCACATTACGAAGATGCAGACTTNAGGCCTGGTTGCAGTANGCTT
GAAATCTGGGATGTGGAAGACCCCTTCCAATGCAGNTAACCCCTTCCTTANGTAGCGTCCTGNTC
GAAGACGCCAG

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FIGURE 295

TCCAAAAAAAAAATAATGGAAAAC TGGAAAGAGAAAAATTGTTTCAAAAAC TATAGCACACCT
GTTGTTAGATTCTTGTCTTGCCTAANGTTTTTCAATTTTANTATTTTCTACAGTTTGGACCGA
ATTCTAATTTTTNTTGACTACAAGTNTTCAAATAATGNTTTCANTTTTTTCTTCTTTTTTCC
ATTTTTTTCCAATTTGGAGTCNCTGAAAAC TAANCTGTGCTTTCATAAAGCCCTGCAAAC TGA
ATCTAGACAACTTCAGAAGAAAAATNACAGCAACCTATTTACATACATAAGCCACTTTCANAC
CTGCCTACCGATGTATGGACTTCAGAGTAATGTGGNTTATAGCAATTTTCCAGGATTGNTCTT
TTGTTTGNTGNTGTTCTCCCTTCCTCCCCCTATTTTGTCTTTATGGGACATGACACTTCACAA
CCTTNTAAAAATGAGTTTTCTTAATAACTCAGGACCTACTNGTNTAGAAATNAACCATCCTAG

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FIGURE 296

TTTTTTTTTCCCCTTTGGGCCAGGTCGGGGTATGATAGGTCGGGGAANAGGGGGCTTTGGAGG
CCGAGGCCGAGGCCGTGGACGAGGGAAAGGTGCCCTTGCTNGCCCTGTATTGACCAAGGAGCA
GCTGGACAACCAATTGGATGCATATATGTCGAAAACNAAAGGACACCTGGATGCTGAGTTGGA
TGCCTACATGGNGCAGACAGATNCCGAAACCAATGATTNAAGCCTGCCCATCCTNCCATGANA
GACTNNTGTTAGTCAACACATCTGTAAATAACCTTGAGATNACAGATGAGAAGAAATCTGATT
GATGCTGGATGGACCTATCACAATAGGCTGTGGACTTACTTGCCACCAGNTTGTGCATTTAGT
GTGTCCTTTTACTTTTGTACTGTGTTGTATGAAACCCTTTGTCCTTTGATTTGGTTTTT
TGNTTTTGTTTTTTTANGGGGGANGGGGGTTTCCCCTCCTTTGCCCAGACTTNTCTTTGAAC
ACAAATGCATTAGCCTTGTGGNTAGAACACCCTNTTCCTACCTCTGTNTCCCC

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FIGURE 297

GGTAATGGAAAACCCGCAATTACATTTGAACCAACCTAATAGATNTAAGGAAAAGCGCTTTCC
ATTCGTAGCATCAGTCTGGCCACATCCCTTGTGAGCCACTGCGCCCGGCTTGTGGCCGTATT
TTTGGAAATGCATTTGGAGCTTGGGTCAGTAGTTTTTGTTCATGTGATGTCACCAACATGTT
GCCTATACAGATTGAATATCCCTTATCCAAAATGCTTGCAACCAGAAGTGTTTTGGATTTTTG
GAATTTTTTTTGGATTTTGGAAATATCTTCATGTAAATAATGAGATTTGTTGGGGATCAGACTC
AAGTCTAAACATGAAATTCGTTTATGTTTCATATATACTTTATACACATACCTTAAAGGCAGT
TTTATACAGTATTTTCAATGGTGTGCATGAAACAAAGTTTGTGTTTCATTGATCCATCAGAAAG
CAAAGATGTCACCTGTCTCAGCCACACGTGGACAATCTGGTTGGTTAGCGTCCCCATCGTT

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FIGURE 298

GGCCCCGCGTGCCGACATGGGAAAGTCTCTTTCTCATTTCCTTTGCATTCAAGCAAAGAAGA
TGCTTATGATGGAGTCACATCTGAAAACATGAGGAATGGACTGGTTAATAGTGAAGTCCATAA
TGAAGATGGAAGAAATGGAGATGTCTCTCAGTTTCCATATGTGGAATTTACAGGAAGAGATAG
TGTCACCTGCCCTACTTGTGAGGGAACAGGAAGAATTCCTAGGGGGCAAGAAAACCAACTGGG
GCATTGATTCCATATAGTGATCAGAGATTAAGGCCAAGAAGAACAAAGCTGTATGTGATGGCT
TCTGTGTTTGTCTGTCTACTCCTTTCTGGATTGGCTGTGTTTTTCCTTTCCCTCGCTCTATC
GACGTGAAATACATTGGTGTAATAATCAGCCTATGTCAGTTATGATGTTTCAAGCGTACAATT
TATTTAAATATCACAAACACACTAAATATAACAAACAATAACTATTACTCTGTCTGAAGTTGAA
ACCGAACCCCT

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FIGURE 299

GAGCGGAGCCGGCGGAGCCTCTGGAATCACCCGGGTCGCTGTTTCCTGAGCAGCTGCAGAGCAT
CGAGGGCTGGAGAGGAGCACATACTGTCCATGGAGCTGGTGGTCAAGGTGGACAGGGGCGGTG
GTGATGGCGCAGTTTGACACTGAATACCAGCGCCTAGAGGCNTCCTATAGTGATTACCCCCA
GGGAGGAGGACCTGTTGGTGCACGTCGCCGAGGGGAGCAAGTCACCTTGGCACCATATTGAAA
ACCTTGACCTCTTCTTCTCTCGAGTTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGC
TCATCGGGGAGATCTTTGAGCTCATGCAGTTCCTCTTTGTGGTTGCCTTCACTACCTTCCTGG
TCAGCTGCGTGGACTATGACATCCTATTTGCCAACAAGATGGTGAACCACAGTCTTCACCCTA
CTGAACCCGTCAAGGTCACCTCTGCCAGACGCCTTTTGGCC

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FIGURE 300

TATGGAACAGCCTCCTTTTGACANCAGTTACGGGCTGGTGGTGGCAGGGTCTGTTCTGGTCCT
GGGAGCCATCATCGGTGACTGGGTGGACAAGAATGGTAGACTTAAAGTGGCCCAGACCTCGCT
GGTGGNACAGAATGTTTCAGTCATCCTGTGTGGAATCATCCTGATGATGGTTTTCTTACATAA
ACATGAGNTTCTGACCATGNACCATGGANGGGTTCTCACTTCCTGNTANATCCTGATCATCAC
TATTGCAAATATTGCAAATTTGGCCAGTACTGNTACTGCAATCACAATCCAAAGGGATTGGAT
TGTTGTTGTTGCAGGAGAAGACAGAAGCNAACTAGCAAATATGAATGCCNCAATACGAAGGAT
TGACCAGTTAACCAACATTTTAGCCCCCATGGCTGTTGGCCAGATTATGACATTTGGCTCCCC
AGTCATCGGCTGTGGNTTTATTTTCGGG

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FIGURE 301

ACCGCCTGACCGTGCTGGCTGGTGCAATGCTTGCCTTGGGACTAATGACATGCTTGTCAGTTT
TGTTTGGCTATGCCACCACAGTCATCCCCAGGGTCTATACATACTATGTTTCAACTGTATTAT
TTGCCATTTTTTGGCATTAGAATGCTTCGGGAAGGCTTAAAGATGAGCCCTGATGAGGGTCAAG
AGGAACTGGAAGAAGTTCAAGCTGAATTAAAGAAGAAAGATGAAGAATTTCAACGAACCAAAC
TTTTAAATGGACCGGGAGATGTTGAAACGGGTACAAGCATAACAGTACCTCAGAAAAAGTGGT
TGCATTTTATTTACCCATTTTTGTTCAAGCTCTTACATTAACATTCTTAGCAGAATGGGGTG
ATCGCTCTCAACTAACTACAATTGTATTGGCAGCTAGAGAGGACCCCTATGGTGTAGCCGTGG
GTGGAACGTGTTGGCGAACCCCTTGC

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FIGURE 302

TCGAACCCANGGGGNCCGCCGAACGCGTGGGACCATATAGAGAAATAGCATGAATATTTTTAT
TAGGAGATGTTTCAAAGACTGTATTCCAATGGTTAAAGGAAAGTCCAAAACCTCTTTAAGGAA
CACTGCAAGTTGAGCCTCTGCTGTTTTAATAGGTAGGTGACCTTGCCCTGAGTCAGTCTTTTTG
AATTTCAATTTTCTAATCTTTAAAATGAGGTTTTTGGTGATCCCTCAGTTTCCTTTCAGCTCT
GGAATTTGGTGGGTAAGTTACCTTGAATGTGTATCTTTTCTTGTTAAAATTTTAAAAACAAT
ATAGAAGGAAACAAATCCTTTTTACTCCTATTTTTTTAGAAATAACCCCTAAACCTGGTAATAT
TTTGACGTGTTTTTTTCAAACCTGTCTGTGCATTTTTTTAAAGGAGCTTCTGTCGTATATAGTT
ATGCCCTGCTTTTGTGTGCATGTTAAGCATTTGGTATGTTATTTTAAAGTGGAATGCCTTGAA
GAATGAATCAGTCAGACCTACTGTTAACATTTTGATGTATTTTCAGACTGACTTACAATTTTTT
GGTATTTGATATTATGTATAATTATATCCTGCATTTACTTAGCATATTAAGGATTTTTTTTATA
TGTAATTTTAAAGTGGA

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FIGURE 303

ATTTTTTATGTATTCATAGTATAAAAGACCTTCAGTAAATAGGTAATATTTTTGTTTTATTCT
AGAAAACAGCTCCTTGAACNCAGTAAGCTGGCTTTTCACNCATTGCCAGTGGTAAGTGTTTAC
TGCCCTTGCCATTTTAATTATGAGGCTAAAGATGTTTTTGACACCGCACATGTGTGTTATGGC
TTCCTTGATATGCTCTCGACAGCTCTTTGGCTGGCTTTTTTCGCAGAGTTCGTTTTGAGAAGGT
TATCTTTGGCATTTTAACAGTGATGTCAATACAAGGTTATGCAAACCTCCGTAATCAATGGAG
CATAATAGGAGAATTTAATAATTTGCCTCAGGAAGAACTTTTACAGTGGATCAAATACAGTAC
CACATCAGATGCTGTCTTTGCAGGTGCCATGCCTACAATGGCAAGCATCAAGCTGTCTACACT
TCA

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FIGURE 304

ATGAAATCCTGCTTTCTTTTCCTCAGAACTACTATATTCAGTGGCTAAATGGCTCCCTGATTC
ATGGTTGTGGAATCTGGNTTCCCTTTTTTCCAACCTTTGGTTAATTGGAATTGATGCCCTTTG
CCTTTTTCTTTCTGGAATCAGAAGGCTTTGCTGGCCTGAAAAAGGGAATCCGAGCCCGCATTT
TAGAGACTTTGGTCATGCTTCTTCTTCTTGC GTTACTCATTCTTGGGATAGTGTGGGTAGCTT
CAGCACTCATGACAACGATGCCGCAAGCATGGAATCTTTATATGATCTCTGGGAGTTCTATC
TACCCTATTTATATTCCTGTATATCATTGATGGGATGTTTGTTACTTCTCTTGTGTACACCAG
TTGGCCTTTCTCGTATGTTTCACAGTGATGGGTGAGTTGCTAGTGAAGCC

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FIGURE 305

ATAGTATTAAGTCNATTGNGCAAGTGNAGCCTTAGAAGATTTGGAGTGTTTTNACTCTTTTT
CNTGGTGGCTTAGAATTTTCTCCAAGAAAAGTTAAGAAAGGTGTGAAGATTTCTTACAAGGN
CCGTGTACATGACACTGTTAATGATTGCATTTGGCTTGCTGTGGGGGCATCTCTTGCGGATCA
AACCACGCAGAGCGTCTTCATTTCCACGTGTCTGTCCTTGTCAAGCACACCCCTCGTGTCCA
GGTTCCTCATGGGCAGTGCTCGGGGTGACAAAGAAGGCGACATTGACTACAGCACCGTGCTCC
TCGGCATGCTGGTACGCAGGACGTGCAGCTCGGGCTCTTCATGGCCGTCATGCCGACTCTCAT
ACAGGCGGGCGCCAGTGTCATCTTCTAGCATTGTCTGGAAGTTCTCCGAATCCTGGTTTTGAT
TGGTCAGATTCTTTTTTCACTAGCGGCGGTTTTCTTTTATGTCTTGTTATAAAGAAGTATCT
CATTGGACCCTATTATCGGAAGCTGCACATGGAAAGCAAGGGGAACAAAGAAATCCTGATCTT
GGGAATATCTGCCTTTATCTTCTTAATGTTAAC

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FIGURE 306

AACCTATATAAAATAGTTTTTAGCAGTTTATAGCTGTGACCATCAAGTCAGATAATTTGGGAT
GTTACAGAGAGCTCTGGGTGATTATGACAGTGACCACCCACATCTCTTATTTGTTNTGCTTC
ATTTCTCTACTAGGGAGAGGAGGTCATATAATATATGGTATTTTTATGTTATTTTAGATAAAT
CCATATCAACACAGCACAGGAGAACNAATTATACCCCTGGTAGATTTTGGGGTATAAACGTC
ATGAAATGTTTCTCAGAAAGTGAGAAATATTTCTTGATTGTATCTTTAAATTAATGCAAAAT
TGTTATGTTACTCCATAATTTATTTGTGTGCATTACTGTAAGGTTTCATGTGTATTCATATTAA
ATTTTTCTTTTAAAAATTGGGTTCATGAATTATCTAGGATGATTGCATTGTTTGTGGCATC
AAGTGTTGTTTCTCCCTTTCCATACCAAGCATATCCTGCTTTTGGTACAGG

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FIGURE 307

TTACTTGTGAGTATCATCNTGTCCTTTAATCCTGTACCCTAAAATAAGNAATACATTTTTGAC
ANAGGCTTAATGTTTTAACAAAAGAGTGTGGACATTTTTATTTTAAAATTTAGGCAAAAAGTCA
CTATCAAATGGTTGCTTATTTGTCTCACACANCCATATAGTTTTTCCTGGANGGTTTTGTTTT
GTTGTTGTTGAAAAGACTTTGNTTACAGNTANATGNAACCTTTTTATAGAAAAAAAAAATTGT
TGAAAGGTCCAGTTCTCAGTACCATGTGAGTTAATGATACTACAACCTAAGTTCTTTTTAAAAA
GTGATTAATGTATTTTATAAATTACCTTTTCACATATGCAAAATCTGTTTCTACTACAATGTT
ATTTTTACTAATGCCTTATTGTTGCACTCTTTTTGAAATATCCTGCAGTGAATATATGAATCA
ATTTGGGCTTAAAACTGAAAGCCAGTTGGCTGAAAGGTTTGAAATACGTACCCC

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FIGURE 308

TTCTTTCTTTTCCCCATNTCATTTCATTTCAGGCTCCTTTTCGCANAAGTGAGGTATTTAGATAAT
CAAAACCCACACAAGACCTCAACAGCAAATACAGATGAAATGTAATTATTATTTCAATTAAA
AAGGAATAATATTTGTAGGCCATTGTNACCAGTATTCTCTCGTTTTAACTAGTTTGTCTGCA
TTTAAATTAAGTGCTGCTCTTCAGCTTTTGTGTACAGCTATAAGTGCACATTGGAATTTATAT
GTATATATATATAGAGAGAGAGAGAGAGAGAGAGAAAATGACTGCTGGTTCAGTGTGTGTCCCTC
AGATCATACCACTACGAGTGCCTCAGCCTGGAAAAGCTAACCATGAAATTGATAACAATACGC
TTTTGGAAATGAAATCAGGTAAGAATCACATATGTTTGAAATTGTTTAAAATAACATTGTCAT
ATTTCTTGTGTTATCTGGTTGCTGGTTTATCTCTTTG

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FIGURE 309

GTGGCCCGTCTGGCTAGTCCTGTNTAAGCGCGCCCATTTTCGAGCCCAAGTTTCCAGCTCGGGT
TTCCGGGCTCAGAATTTTCCAGGAGTGGGTTCTTGGGCAGTGGCTGTGGAACAGGAATGGCGC
AGCTANAGGGTTACTGTTTCTCGCCGCCNTTGAGCTGTACCTTTTGTAGTGTCTGCCTCCTCT
TCTCCGCCTTCAGCCGGGCGCTGCGAGAGCCCTACATGGACGAGATCTTCCACCTGCCTCAGG
CGCAGCGCTACTGTGAGGGCCATTTCTCCCTTTCCCAGTGGGATCCCATGATTACTACATTAC
CTGGCTTGTACCTGGTGTGAGTTGGAGTGGTCAAACCTGCCATTTGGATCTTTGGATGGTCTG
AACATGTTGTCTGCTCCATTGGGATGCTCAGATTTGTTAATCTTCTCTTCAGTGTGGCAACT
TCTATTTACTATATTTGCTTTTCCACAA

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FIGURE 310

CGCNTCGGCCCATGNACGCCTTGTGCGGTTCCGGGGAGTCGGCTCCAAGTCTGGGACTCCAAC
CTGTCTGTGCACACAGAAAACCCGGACCTCACTCCCTGCTTCCAGAACTCCCTGCTGGCCTGG
GTGCCCTGCATCTACCTGTGGGTCGCCCTGCCCTGCTACTTGCTCTACCTGCGGCACCATTGT
CGTGGTACATCATCCTNTCCACCTGTCCAAGCTCAANAATGGTCCTGGGTGTCCTGCTGTGG
TGCGTCTCCTGGGCGGACCTTTTTTACTCCTTCCATGGCCTGGTCCATGGCCGGGCCCCCTGCC
CCTGTTTTCTTTGTCACCCCCTTGGTGGTGGGGGTCACCATGCTGCTGGCCACCCTGCTGATA
CAGTATGAGCGGCTGCAGGGCGTACAGTCTTCGGGGGTCCTCATTATCTTCTGGTTCCTGTGT
GTGGTCTGCGCCATCGTCCCATTCCGCTCCAAGATCCTTTTAGCCAAGGCAGAGGCTGAGATC
TCAGACCCCTTCCGCCTCAC

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FIGURE 311

CCATCAGGAAGGTGAAAGAGGTCTTTGGGACAGGGGCCATGAGACATGTGGTCATCCTCTTCA
CCCACAAAGAGGACTTAGGGGGCCAGGCCCTGGATGACTATGTAGCAAACACGGACAACTGCA
GCCTGAAAGACCTGGTGCGGGAGTGTGAGAGAAGGTACTGTGCCTTCAACAAC TGGGGCTCTG
TGGAGGAGCAGAGGCAGCAGCAGGCAGAGCTCCTGGCTGTGATTGAGAGGCTGGGGAGGGAGC
GAGAGGGCTCCTTCCACAGCAATGACCTCTTCTTGGATGCCCAGCTGCTCCAAAGAACTGGAG
CTGGGGCCTGCCAGGAAGACTACAGGCAGTACCAGGCCAAAGTGGAATGGCAGGTGGAGAAGC
ACAAGCAAGAGCTGAGGGAGAACGAGAGTAACTGGGCATACAAGGCGCTCCTCAGAGTCAAAC
ACTTGATGCTTTTGCATTATGAGATTTTGTCTTTCTATTGTTGTGCAGCATACTTTTTT

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FIGURE 312

TCTTTGTTCTCACAAGTTATCTTTACATTGGAATGACCCTGAATTAGGAAGTTAAAGTGAAC
TGGTTGGATTGGATACTGCTNTAAAAGTTAGAAAATTAGGTCATTTGACATTTNTGCTCCGT
GTTTGGCCATGTTTGGTTCCTACATACTTTTGCAAAGATCAAGGAAGACCTTTGAGGCATCTC
TTTATCTCTTATTTCTATTACTATCACCCCAATTCAAGTCATCATCATTACCCTGGACTTCTG
GGATAGCTTCCCACTGTTCCCACTCATCTACTCTTGCTCACTGCCTTCCCCCAAACCCCTA
AAATTCATTCTCCAGATAGTGACTAGAGTGAATCGACTATATCTTCTCTTTCTGCTCTGGA
TATAATTTATATCTTTTCTGCTCTGGATATAATTTATATCCTTCATTCTCCATTTCTGTGCC
CCTGTGTGCCAACTGCTATTGTCTGCATTAGATGGACTTCCTTATCTTCTGGCTTCTATTGAA
TTTGGTGAAGTGGGGAGGGTCAAGTAGGAGATCAGTGTGTGGGAGAAGAAAGAAGTTTGAGTA
TTTATCACCTAGGAAGGGGGACTTCCAGGACACTGTTTGGCAGGGATGCTGGGCCTCTACTGG
AGGCCTAGTTCCGACTGTGTTGCCC

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FIGURE 313

TTTTTTTTTTTTTTTTTTTTGGATTAATGAGGAAATCATTCTGTGGCTCTAGTCATAATTTATG
CTTAATAACATTGATAGTAGCCCTTTGCGCTATAACTCTACCTAAAGACTCACATCATTTGGC
AGAGAGAGAGTCGTTGAAGTCCCAGGAATTCAGGACTGGGCAGGTTAAGACCTCAGACAAGGT
AGTAGAGGTAGACTTGTGGACAAGGCTCGGGTCCCANCCGGACGNGTGGG

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FIGURE 314

ATTGCGGTTTTTTTTTCCAAAAATTGCTGAAATATTGTTTTGCCATTTTTAAAAAGTCTCAG
GTTATTACCACTCTGCCATTAAATATTTGTATGCCTGCATTTTTAAAAATTCTGTGCATGTAC
TTTATGGAGTACATTCTATTTTTGTTTTTCAGATACCCCGGACGCGTGGG

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FIGURE 315

CGGACGCGTGGGGAAACCTTGCCTTCAAGGGTTTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT
GTTTGGGTTTGTGTTTGTGTTTGGTTTGGTTTGTGAAACGGAGTCTCGCTCTGTGCGCCAGGCTGG
AGTGCAGTGGCGCAATCTCGGCTCACTGCAAGCTCCGCCTCCCGGGTTCACGTCATTCTCCTG
CCTCAGCCTCCCGAGTAGCTGGGACTACAGGCGTCCACTACCACGCCTGGATAATTTTTTGTA
TTTTCAGTANAGACGGGGTTTACCGTGTTAGCCAGGATGGTCTTGATCTCCTGACCTCATGA
TCCCGCCTGCCTCGGCCTCCCAAAGTGTTGGGATTACAGNGCGTGAGCCACCGNGCCGGGCAC
CTTCAAGGTTTTGTTAATTTTGGATAATGCTACAATCCGTTGCTGCAAAGAACTCGAAAATGC
ACACGCCAACATAGGAGTTCTTTTTATGCCCCCAAACATTAAGTNTTTCATCCAACCCCTCAA
TCGGGGCATAATAAAAGCATTCAAGGCACACTACNACAAGGGAGCTTTATATGAAGGCCTGTG
AGGCTCTCAGGACCAACAAGGAAACCACCATGCTGGACTATTGGAAGTCGGTCACTACATGCA
ACGTTATTGATTATGTCAGTACAGCCTGGGAGAGCATTTGGTCAGGCTACTACCAATAACTGTT
GGGAAAATGTTTGGCCAGACTGCGTGGAGAATTTTGAAGGGTTTGAAGGTGTTACAGAAAATA
TAAAGAACACTGTCAGAGACATAATGCATATGGCACAGCAGGTAAGTGGAGAGGGCTTTGATG
ACGTGAAGGAAGGAGATGTGGAGTACATTTTGGCAGAGAAGGCAGTGAACCAACCAACGAAG
ACCTGGATGAGATGGCAAACAAGGCATTGGAGTTGATGGCCATGAAAGTCGGCCCAAGACTT
CCAGAATTGTCCCTCTCACAGCGCCC

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FIGURE 316

AAATTCTACTTCCTGGATTTTGGAAGGCCAAAACATTTTTTCCCATGGGATACATCCCCATG
TTTNTGGCACAATCCTTCTTTGAAAATAATATGGAACCTAGATATATTTAGNCATTACGTTCN
TCTGGNTGNATGACATCATTCAAGAGCTTTTCAAAGCATTTG TTCAGATCTTCAGTACTGGCC
AGTTTTCATACAGTCTCGGGGTTTTAAACTTTGAAATCAAGGACACGACGTCTCCAGTCTAC
CTCCGAGAGATTAGTTGAAACNCAGAATATAGCGCCATCATTCGTGAAGGGGTTTCTTTTGCG
GGACAGAGGATCAGATGTTGAGAGTTTGGACAAACTCATGAAAACCAAAAATATACCTGAAGC
TCACCAAGATGCATTTAAACTGGTTTTGCGGAAGGTTTTTCTGAAAGCTCAAGCACTCACAC
AAAAAACCAATGATTCCCTAAGGCGAACCCGTCTGATTCTCTTCGTTCTGCTGCTATTCTGGCA
TTTATGGACTTCTAAAAAACCCATTTTTATCTGTCCGCTTCCGGACAACAACAGGGCTTGATT
CTGCAGTAGATCCTGTCCAGATGAAAAATGTCACCTTTGAACATGTTAAAGGGGTGGAGGAAG
CTAAACAAGAATTACAGGAAGTTGTTGAATTCTTGAAAAATCC

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FIGURE 317

CGCTTGGGCAGGTTGGGGTTGAACTNTTCACCCCTTGCGGTNTGTACTGCNTCCCAANTGAG
CAGCCAGGAGAAGGCTAGAGCCTGTGCCTTTCAGCTAGATAGCTGGAGGAACTGGTCCTCCCT
CCTTAGGCTGTGCTGGCCTGAGCTGGGAGCCTGAGAGCTGGGGCAGTTGTCTCTAAAGTGGCT
TCTGGGATTCTGGTAAGAGCGTTACATCCTTACTATTCAAAGTGCCATCCACAGACCTGCTGA
TGGGCAGCATGAGCATCACCTGGGAGCTTGCTGCGCTGTAGAATCTTGAGGGGTCTCCATCCA
GATCAGCTGAATCAGAGTTTGCATTGTAAACAAGATTCTGCTTCTCAGAAGATGCACTATTAT
AGATACTCTAACGCCAAGGTCAGCTGCTGGTACAAGTACCTCCTTTTCAGCTACAACATCATC
TTCTGGTTGGCTGGAGTTGTCTTCCTTGGAGTCGGGCTGTGGGCATGGAGCGAAAAGGGTGTG
CTGTCCGACCTCACCAAAGTGACCCGGATGCATGGAATCGACCCTGTGGTGCC

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FIGURE 318

NTGCAGTCAACGCAGCTTCCCGGGTTCAGCCTGGGAANATGCGCGAATCGGNAACCCAGAGC
CCGGTGGTTAGACCGGGGTCCGCCGCTTCCCCACAGCCNTTTCCTAATCGTTCAGACGGAG
CCTGGTCGACTTCGCCGGAGACTGCCAGATCTCGTTCCTCTCCCTGTGTCATCTTCTTAATT
ATAAATAATGGGGGATGAAGATAAAAGAATTACATATGAAGATTCAGAACCATCCACAGGAAT
GAATTACACGCCCTCCATGCATCAAGAAGCACAGGAGGAGACAGTTATGAAGCTCAAAGGTAT
AGATGCAAATGAACCAACAGAAGGAAGTATTCTTTTGAAAAGCAGTGAAAAAAGCTACAAGA
AACACCAACTGAAGCAAATCACGTACAAAGACTGAGACAAATGCTGGCTTGCCCTCCACATGG
TTTACTGGACAGGGTCATAACAAATGTTACCATCATTGTTCTTCTGTGGGCTGTAGTTTGGTC
AATTACTGGCAGTGAATGTCTTCCTGGAGGAAACCTATTTGGAATTATAATCCTATTCTATTG
TGC

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FIGURE 319

TCAGCGGGTAAGAAAATTCTACTTCCNGGGATTTTTGTAAAAGGCAAAAACCTTTTNTTCCCC
ATTGGCATAACATTCCCAANGTTTNTGCCCAATCCTTCTTTTGAAAATTAAATATGGAAGCTTAG
ATATATTTAGTCATTACGTTCTCTGGCTTGTATGGACATCATTCAAGAGCTTTTCAAAGCAT
TTGTTTCAGATCTTCAGTACTTGGCCAGTTTTTCATACAGTCTCGGGGTTTTAAACTTTGAAAT
CAAGGACACGACGTCTCCAGTCTACCTCCGAGAGATTAGCTGAAACACAGAATATAGCGCCAT
CATTCGTGAAGGGGTTTCTTTTGCGGGACAGAGGATCAGATGTTGAGAGTTTGGACAAACTCA
TGAAAACCAAAAATATACCTGAAGCTCACCAAGATGCATTTAAACTGGTTTTGCGGAAGGTT
TTTCTGAAAGCTCAAGCACTCACACAAAAACCAATGATTCCCTAAGGCGAACCCGTCTGATT
CTCTTCGTTCTGCTGCTATTCGGCATTATGGAAGTTCTAAAAACCCATTTTTATCTGTCCGC
TTCCGGACAACAACAGGGCTTGATTCTGCAGTAGATCCTGTCCAGATGAAAAATGTCACCTTT
GAACATGTTAAAGGGGTGGAGGAAGCTAAACAAGAATTACAGGAAGTTGTTGAATTCTTGAAA
AATCC

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FIGURE 320

GCCNAGCGGACGGGCGCTTAAACGGGCTGCTCGTGCCGATTCTTTTACCTGAGAAATGCTAC
GACCAACTTTTCGTTTCAGTGGGACTTGCTTCACGTCCCCTGCCTCAAGATTCTCCTCAGCAAA
GGCCTGGGGCTGGGCATTGTGGCTGGCTCACTTCTAGTAAAGCTGCCCCAGGTGTTTAAAATC
CTGGGAGCCAAGAGTGCTGAAGGGTTGAGTCTCCAGTCTGTAATGCTGGAGCTAGTGGCATTG
ACTGGGACCATGGTCTACAGCATCACTAACAACCTCCCATTTCAGCTCTTGGGGTGAAGCCTTA
TTCCTGATGCTCCAGACGATCACCATCTGCTTCCTGGTCATGCACTACAGAGGACAGACTGTG
AAAGGTGTCGCTTTCCTCGCTTGCTACGGCCTGGTCCTGCTGGTGCTTCTCTCACCTCTGACGCC

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FIGURE 321

GTTGGCCTGATTCTCCCCACCAGAGGACAGACGTTGAAAGATACCACGTCCAGTTTTCAGCAG
ACGCAACTATCATGGACATTCAGGTCCCGACACGAGCCCCAGATGCAGTCTACACAGAACTCC
AGCCCACCTCTCCAACCCCAACCTGGCCTGCTGATGAAACACCACAACCCAGACCCAGACCC
AGCAACTGGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACACAAGAGCACCAAAG
CAGCTCATCCCCTGATGACACCACGACGCTCTCTGAGAGACCATCCCCAAGCACAGACGTCC
AGACAGACCCCCAGACCCTCAAGCCATCTGGTTTTTCATGAGGATGACCCCTTCTTCTATGATG
AACACACCCTCCGGAAACGGGGGCTGTTGGTCGCAGCTGTGCTGTTTCATCACAGGCATCATCA
TCCTCACCAGTGCGGACGCGTGGGCGGACGCGTGGG

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FIGURE 322

CAGTGCCTTTAGATTGTGTTTTGCCTCCTCCAATGTAGAGTTGACATNTGGACCCCAGAGCCC
AGCAGGGCTTTNTGTCAGACATGTAGGGTGGTAGAAATGGGCCCTCCAGGTCCCCCTGCAGTG
CACTGGGCAGAGACCTCCGGAAAGCCGGCAGCGGGAGCGCTTCCTGGGCAGCTTCCCCCAGCA
CAGTGTTCCCAAACCAGTCCATCCGGAAAACAGTCTGTACAGCAAATGCTGTGTGAGATCTTA
GGCTTTTCACTTTTTTTTGTGTTTTGTTTTGTTTTGAAAGAAAGAAAAAATAACAATTAACAAG
CCTCTTTTGTAATGGGTTTCCTTTCTATGTATAAAATCGTGGTGGTCCCTTGTTTTTACATG
TTCATGCTGTGTAATTTTGAGATGTTACTGAGATATGTTCTGAACATAATGTGCATTTTTTTC
TGTACAGATGAAATGGGAGAATTTAATAAAGAGTTTGCAGCCCACGCGTCCGCGGACGCGTGGG

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FIGURE 323

GAAGTGTTCACTGGACAATTNGCAAGTTAGGTCCAGTTCAGTTGGAGGATTCTTCCATTGTT
CCAAGGTGTGGNAATTNCAATGGTCCTGATCTCCATTTTTGTGNCAATCTATTNCAATGTCAT
AATTGCCTATAGTCTTTACTACATGTTTGCTTCTTTTCAAAGTGAAGTACCATGGAAAAATTG
TTCTTCGTGGTCAGATAAAAACTGTAGCAGATCACCAATAGTAACTCACTGTAATGTGAGTAC
AGTGAATAAAGGAATACAAGAGATCATCCAAATGAATAAAAGCTGGGTAGACATCAACAATTT
TACCTGCATCAACGGCAGTGAAATTTATCAGCCAGGGCAGCTTCCCAGTGAACAATATTGGAA
TAAAGTGGCGCTCCAACGGTCAAGTGAATGAATGAGACTGGAGTAATTGTTTGGTATTTAGC
ACTTTGTCTTCTTCTGGCTTGGCTCATAGTTGGAGCAGCACTATTTAAAGGAATCAAATCGTC
TGGCAAGGTGGTATATTTTACAGCTCTTTTCCCCTATGTGGTCCTACTCATCCTGTTAGTACG
AGGTGCAACTCTGGAGGGTGCTTCAAAGGCATTCATACTATATTGGAGCCCCGGACGCGTGGG

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FIGURE 324

CGGGGGGCGTACACCACTGCCTGNGTCTTCACCACCGCCGCCGTGCAGTTGGAATTGATCACA
CCTTTTCAGTTGTACTTCAATCCTGAATTAATCTTTAAACACTTTCAAATATGGAGATTAATC
ACCAACTTCTTATTTTTTGGGCCAGTTGGATTCAATTTTTTATTTAACATGATTTTCTATAT
CGTTACTGTCGAATGCTAGAAGAAGGCTCTTCCGAGGTCGGACAGCAGACTTTGTATTTATG
TTCCTTTTTGGTGGATTCTTAATGACCCTTTTTGGTCTGTTTGTGAGCTTAGTTTTCTGGGC
CAGGCCTTTACAATAATGCTCGTCTATGTGTGGAGCCGAAGGAACCCCTATGTCCGCATGAAC
TTCTTCGGCCTTCTCAACTTCCAGGCCCCCTTCTGCCCTGGGTGCTCATGGGATTTTCCTTG
TTGTTGGGGAACCAATCATTGTGGACCTTTTGGGTATTGCAGTTGGACCGGACGCGTGGG

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FIGURE 325

TGCAAATTNTGAGATTCAGAGACTAAAGTAATTTATTTATACATAGCTAATCAGTGCCAGAGC
TGTGAATCTAAGATTATCTTGCTCTTAATCACAAAATAACACAGTTATTAGTTGTTTGCATTT
GATGCAAATGACTTGGAACCCACACATTTTACACATTTTAAATGAATGAAATGACTAGTTTGA
TTCATTACACGTTTGTGGAAATTTTGCAGCTAGGTTTTAAATTAAGAACACCAGATTTATTTA
AATACAATTTAAAATCATTGTATTCCAAATGGAAGTTTTCTTCTATAAGAATACCAGGCTGGA
TGTGGTGGCTCACACTTGTAATCCTAGCACTTTGTGTGGCCGAGGAAGCGGACGCCTGGG

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FIGURE 326

GTCAGGATTTTTGAAGTTTTTTTTTTTATAGTGAGATAATGGAGTTGGTCTTAGCCGCTGCAG
GAGCCCTTCTTTTCTGTGGATTCATCATCTATGACACACACTCACTGATGCATAAACTGTCAC
CTGAAGAGTACGTATTAGCTGCCATCAGCCTCTACTTGGATATCATCAATCTATTCCTGCCGG
ACGCGTGGG

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FIGURE 327

CAAGTTAGGTGATCCAGNTTTTGTGGTCTTTTGCAACCCTTGTGGTCATTGTGCCCTTGATAT
TAATCTTCGTGGTGGGTCCCTCGCCATGGCAGACAAACATTCTTGTGTACATAACAATCTGCTC
TGTAATCGGCGCGTTTTTCAGTCTCCTGTGTGAAGGGCCTGGGCATTGCTATCAAGGAGCTGTT
TGCAGGGAAGCCTGTGCTGCGGCATCCCCTGGCTTGGATTCTGCTGCTGAGCCTCATCGTCTG
TGTGAGCACACAGATTAATTACCTAAATAGGGCCCTGGATATATTCAACACTTCCATTGTGAC
TCCAATATATTATGTATTCTTTACAACATCAGTTTAACTTG TTCAGCTATTCTTTTAAAGGA
GTGGCAAGAGATGCCTGTTGACGATGTCATTGGTACTTTGAGTGGCTTCTTTACAATCATTGT
GGGGATATTCTTGTTGCATGCCTTTAAAGACGTCAGCTTTAGTCTAGC

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FIGURE 328

AAAGTGGTCCTTTTAGGGTAAAGAGTTTAAAGAGTTTAATGNGTNTATGGCAGGTTTGGGAA
AGGTAAGAAATGGGTCCTTTTCTCCTAATGTTTTTGGCACTTAAACATAAAATTCATTAT
CCTATTAAAAAATTAAATTCAGTTTGCTAATCCAGAAATTGTTCCCAAATGAAAACCTTGTTTT
AAGTCCACCCCTTAGTTTCCTTATTTTACAAGGTCTCTCTTCAGGGACCAACAGGGGCTTAGA
GAGCCTTAGTTAGATTAAAGGGAGACCCTACCTCTTAAACAGTTTTTCATTTATGCAAACAA
GGACAATTAAGGGAACCCTGACCCACAGGCTCTCAAGTCTTCCCAAGGCCAGAATCGAAAGA
AAATTAAAATTTGAATGCTGAATATTCTGGCTCTACTCTGGCCTTTTTTTCTGGTTCCCTTCC
AAAATGCACAAATCATACCCTTGCTCTGCTCCAATTCAGTCTCCAAACCTGGTGCCTGTGCTCC
TGGCCCCCCTAGCATCATGCTATCCCAGGAGTATCAGGACCAGACACATCCACGG

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FIGURE 329

GGCNACGGCGGCCNAAGACGGACATGAAGCAATATCAAGGTTCCGGCGGGGTCCCCATGNATG
TGGAACGNAGTCGCTTTCCCCTACTGCGTGGTGTGNACGCCCATCCCGGTGCTCACGTGGTTT
TTCCCCATCATCGGCCACATGGGCATCTGCACATCCACAGGAGTCATTTCGGGACTTCGCGGGC
CCCTACTTTGTCTCAGAGGACAACATGGCCTTTGGAAAGCCTGCCAAGTACTGAAGTTGGACC
CTGCTCAGGTCTATGCTAGCGGGCCCAACGCATGGGACACGGCTGTGCACGACGCCTCTGAGG
AGTACAAGCACCGCATGCACAATCTCTGCTGTGACAACCTGCCACTCGCACGTGGCATTGGCCC
TGAATCTGATGCGCTACAACAACAGCACCAACTGGAATATGGTGACGCTCTGCTTCTTCTGCC
TGCTCTACGGGAAGTACGTCAGCGTTGGGGCCTTCGTGAAGACCTGGCTGCCCTTCATCCTTC
TCCTGGGCATCATCCTCAC

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FIGURE 330

TTTGATTTAATGTTGGTTGTGTGTCTCCTCCTGGCAACTGGATTTTGCCTGTTTCAGAGGTTTG
ATTGCTTTGGATTGCCCATNTGAGCTCTGCCGATTATATACGCAATTTCAAGAGCCCCTATNTA
AAGGATCCTGCTGCTTATCCTAAAATTCAGATGCTGGCATATATGTTCTATTCTGTTCCCTTAC
TTTGTGACTGCACTGTATGGCTTAGTGGTTCCTGGATGTTCCCTGGATGCCTGACATCACATTG
ATACATGCTGGAGGTCTGGCTCAGGCTCAGTTTTCTCACATTGGTGCATCTCTTCATGCTAGA
ACTGCTTATGTCTACAGAGTCCCTGAAGAAGCAAAAATCCTTTTTTTTAGC

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FIGURE 331

GAAAATATCTGGAGGTACTGCACATAAGGATTCCAATTTCTATTTTCAGAACTTTCATTTGTA
ATTTATGTACGCATCTAACGTCTATTTACGTGTATACTGAGTTAGGGTGTACAACTTTTCCCT
GAGGCTGTATCTCAAAAACTTTGGAAGCTGAAGAATTTGTCCAAATCTATGTTCTTTTTGTT
TGTAATCACCTGATGATGGTGATATAGCTGTGGCCAACGAAATGTCAAGGGAAGTCTGCTGG
GGAAGGTAGACGTAGGATAGGAGTATGGGAAAAAATTATTCACCTCAAAGCATGATGCACAGA
GGAGCTATGATCTTTTCTTGTTTTCTCCTCACTGGATGTTGTCATGTCTGTATGTACTTCCTGGA
ACTGTGGCACCATCTTACAACCATGAAAGGAGCTCACATGAAATCATGTTGAACATAGCAGAG

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FIGURE 332

AGGTTGGTCCTTTTCCGGTTTTTTGGCCAATTTCAAGTTTCCAGNNTCCATNATCCAAGTTTG
AAGCCCCNTGGCGGATCCTTAAAAATCCCTGACCTGACCAGGGTCGCCAAGGGTCGCACAAGG
CCTGGGCCAGGTTCCACAGGGAGGTGAAAAAACTCCCATTCCGTTNAAAAGCAGTTTCCTTT
GGGACCCATTTCTTTTCCCTTTGGCCATGGCCGTGNCCTCCAAAGGTTCCGGTAGTTTAATG
CAAATGTTCTACCAATAGCCCCNAGAACTCCACCACCCTCTCTCTGTCTTGTGGCTCAAGTCG
AGCAACCTGAAAGGATATATTTTTTCAAATAAGTAATTCCTGTAGGCAATAAAAAGATACT
ATCTTCTGAGTGAAATATAAAGAGTTCACAGCAGCTGTCTCCCCAGTTTGCATTTTCCTCTGC
ACCTGATGGGAAGGACAGATAAAGATAATGGGATTTTTTCTTTATTTTTTATTTCACCTCCCT
CTCTCCCTGGAAGGTGGAAATGTAACAAATTGGATTGTGAGTGTGTCTGTCTTTGTGCTTGG
TGCCTGGAGCAGGGCATCCGGCTGCCGGGCAGAGCTGCTGCGAGAGAGGTCAGAGCTACC

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FIGURE 333

CCAAGTTGAAGCCCATGGCGGTCCTTAAATCCTGCCTGACCAGGGTCGCCAGGGTCGGGCAAG
CAAGTGCCAGAAGAATAAAGAAGATGGACGCAAAAAGAAGAAAGGAAGNNCCAGAAGAGACGA
AGAGATGAAACGACAGTCAGATGANATGAGGAGGAAAGAAAGGTTTCANAAAGCCGNCGGAAA
TGAAAGNCGTCCTGGTTTGAANGAANTTGCCAANAGATAAATCCAGCAGGANAGGCCNAGAAA
GATCGAGGTCTGCTTATCTGCTGTTACCTTGGACACCAGAGCAGCTATAGGTATCTGCCAGAG
CTATGAAATCATTGAGCCGATCCTCTTCCTCGTCTTCCTCCTCGCCGGCCTGAGGTCCAAGC
CGCTCCCTCAGCCCCTCTGCCTTTGGGCTGTGGCTTTCCGGACATGGCCCACCCCTCTGAGAC
TTCCCCTCTGAAGGGTGCTTCTGAAAATTCCAAACGAGATCGCCTTAACCCAGAATTTCTTG
GACTCCTTACCCTGAGCCTTCCAAGCTACCTCATACGGTTTCCCTGGAAACCTTCCCACTTGA
CTTCACTGAGCCCCTCAACCCTGACCTCCGAGAAACCCCG

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FIGURE 334

TTCAGACTCACTGAATCAGAACCNTGGGATAGGCCAGCACGCTGTGCTTTACCAAGCTCTAGG
TGATGCCAATTCATACTCAAGTGTGAGGCTGACTGGCTTATTTGAAGGGAGAGAAAGGAACAG
GCACATGGCGACATATCAGCATTTACACAAGGCGTGCTGGGTAACCATAGGAACACCTTTATT
ACGGTTAAATAGGAAACAGGCATCAATGCAGAGGGCCCCCAGGAGAATCAGGAAGGTCGCGAC
TGTCACTGTCTGAGGGCACTGTTGTGAAACGATGGCCGAAGGTGACAACCACAGCAAAGTTTC
AAGGAAGTTCACTGAAACGTGGAAAAACCCACTCAATGTCCTGCTCTCATTTATATTGAGTGG
CTTAAGTATTTATTTTCTTGGTTTTTTAGAGGAAGGGAG

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FIGURE 335

GAAGCTTCCGTTGCCAAGCGACATGTTCAAGGTAATTCANAGGTCCGTGGGGCCAGCCAGCTT
GAGCTTGCTCACNTTCAAAGTCTATGCAGCACCAAAAAAGGACTCACCTCCCAAAAATTCCGT
GAAGGTTGATGAGCTTTCACCTCTACTCAGTTCCTGAGGGTCAATCGAAGTATGTGGAGGAGGC
AAGGAGCCAGCTTGAAGAAAGCATCTCACAGCTCCGACACTATTGCGAGCCATACACAACCTG
GTGTCAGGAAACGTACTCCCAAATAAGCCCAAGATGCAAAGTTTGGTTCAATGGGGGTTAGA
CAGCTATGACTATCTCCAAAATGCACCTCCTGGATTTTTCGAGACTTGGTGTTATTGGTTT
TGCTGGCCTTATTGGACTCCTTTTGGCTAGAGGTTCAAAAATAAAGAAGCTAGTGTATCCGCC
TGGTTTCATGGGATTAGCTGCCTCCCTCTATTATCCACAACAAGCCATCGTGTTTGCCAGGT
CAGTGGGGAGAGATTATATGACTGGGG

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FIGURE 336

GGCGGCCGAGGCGGACGGCCGCTTAAACGGCTGCTCGTGCCGATTCTTTTACCTGAGAAATGC
TACGACCAACTTTTCGTTTCAGTGGGACTTGCTTCACGTCCCCTGCCTCAAGATTCTCCTCAGC
AAAGGCCTGGGGCTGGGCATTGTGGCTGGCTCACTTCTAGTAAAGCTGCCCCAGGTGTTTAAA
ATCCTGGGAGCCAAGAGTGCTGAAGGGTTGAGTCTCCAGTCTGTAATGCTGGAGCTAGTGGCA
TTGACTGGGACCATGGTCTACAGCATCACTAACAACCTTCCCATTTCAGCTCTTGGGGTGAAGCC
TTATTCCTGATGCTCCAGACGATCACCATCTGCTTCCTGGTCATGCACTACAGAGGACAGACT
GTGAAAGGTGTCGCTTTCCTCGCTTGCTACGGCCTGGTCCTGCTGGTGCTTCTCTCACCTCTG
ACGCC

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FIGURE 337

CGGAACGCGTGGGCGNACGCGTGGGCAAGATGTCCCTGTGGACTCCCAAACCTCTACTCCAGAT
GGGNAGGTGCCCTTAACACCAAGATTTTAAAAGCTCCAATTCAGAGCAAGAGTCGAAAACCTC
ACAGATAAAGTTATAGTTATTTCAGGGTTCTGAAAAGACGCAGAACATGAAGGGACTCAGAAG
TCTGGCAGCAACAACCTTGGCTCTTTTCCTGGTGTTTGTTTCCTGGGAAACTCCAGCTGCGC
TCCGCAGAGACTGTTGGAGAGAAGGAACTGGACTCCTCAAGCTATGCTCTACCTGAAAGGGGC
ACAGGGTCGCCGCTTCATCTCCGACCAGAGCCGGAGAAAGGACCTCTCCGACCGGCCACTGCC
GGAAAGACGAAGCCCAAATCCCCAACTACTAACTATTCCGGAGGCAGCAACCATCTTACTGGC
GTCCCTTCAGAAATCACCAGAAGATGAAGAAAAAACTTTGATCAAAC

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FIGURE 338

CCNTGCACAAGCAGCACTTTCTTTTGCCATAGCAACATGTGCATCAATAATTCTTTAGTCTGT
AATGGTGTCCAAAATTGTGCATACCCTTGGGATGAAAATCATTGTAAAGAAAAGAAAAAGCA
GGAGTATTTGAACAAATCACTAAGACTCATGGAACAATTATTGGCATTACTTCAGGGATTGTC
TTGGTCCTTCTCATTATTTCTATTTTAGTACAAGTGAAACAGCCTCGAAAAAAGGTCATGGCT
TGCAAACCGCTTTTAATAAAACCGGGTTCCAAGAAGTGTTTGATCCTCCTCATTATGAACTG
TTTTCACTAAGGGACAAAGAGATTTCTGCAGACCTGGCAGACTTGTCGGAAGAATTGGACAAC
TACCAGAAGATGCGGCGCTCCTCCACCGCCTCCCGCTGCATCCACGACCACCACTGTGGGTCTG
CAGGCCTCCAG

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FIGURE 339

AAATAAAGAACCATGGTATCATGTTGNTCAGTGCTTCAGACAGAAAGATTGTTGAAGCATCAA
GGAGAGCTTTTGTATGTGGCAATGAACTACGAAGAGGAAATGGCCAAGAAACCCGATTGTCT
AGAGAAAGTTTACCAACTACCTGATGGGAAGGTCATCCAGCTCCATGACCAGCTCTTTTCTTG
TCCAGAGGCCCTCTTCTCTCCGTGTCATATGAACCTTGAGGCCCCCTGGCATTGATAAGATATG
CTTCAGCAGCATAATGAAATGTGATACAGGCCTGAGGAATTCCTTCTTTTCCAATATTATCCT
TGCCGGGGGATCAACCTCTTTCCCTGGTTTAGACAAGCT

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FIGURE 340

TGGCGGTCCTAAAATCCTGNCCTGACCAGGGTCCGGCGGTTTCAGTTGGAGGAAAAGTGTAGCC
TTGCAGGTGGCAANTGGTCCAGGTACCGGTATTTGGCNGGCCCGTTTTTGCCTCCTCCTCCGT
GGGTGCGGCGGGAATNTTGGCCGGNCGGCCTTGGGACGGCCCAGGTCCCGGCCGCAAGGTCCG
GGCCAATACATAGTCATCAGTAGAACTTCTTGAAGTTGTTCAAGAAAAATTTGAAAGTAGCA
AAATAGAAAATAAAGAATTAACAGCAGATACAGAGGCAGCATGAAGTGTTGTCTTAGGAAACA
GAACACAGCAGTGAAAAACAGACAAAATCCGCTCAGATACAACTGCAGCTGATAATGTTTTTC
CGGCTTCAATGTCTTTAGAGTTGGGATCTCTTTTGTCTAATGTGCATTTTTTACATGCCAAC
AGTAAACTCTTTACCAGAACTGAGTCCTCAGAAATATTTTAGTACATTGCAACCAGGAAAAGC
CTCTTTAGCTTATTTTTTGTCAAGCTGATTCCCAAGAAATACA

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FIGURE 341

CCGAATCAAGTTCGAGTCATCCGTGTGGGCATTNGTCCCCCNTGGCACAGTTGGCTTCTTTCC
AGAAGCCCGTTTTGTTTGTTTTACGTCTAAATTCGCGTCGGTTCTTATTTCTCTCCCTGGCAA
GGTCTGAAGACGGGTAGGAGAATAACCTGTGTCAGCGTGTTATGATGCCGTCCCGTACCAACC
TGGCTACTGGAATCCCCAGTAGTAAAGTGAAATATTCAAGGCTCTCCAGCACAGACGATGGCT
ACATTGACCTTCAGTTTAAGAAAACCCCTCCTAAGATCCCTTATAAGGCCATCGCACTTGCCA
CTGTGCTGTTTTTGATTGGCGCCTTCTCATTATTATAGGCTCCCTCCTGCTGTCAGGC

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FIGURE 342

AGTTCCGGCAAGGGTGCATCCGGCNTGTGTGTGGCGCAAGGCAAGGAAACCGGTACCCGGGTG
CTGGCCCCAGCGCTGACGTTTTCTCTCCCCTTTCTTCTCTCTTCGCGGGTTGCGGCGTCGCAG
ACGCTAGTGTGAGCCCCCATGGCAGATACGACCCCGAACGGCCCCCAAGGGGCGGGCGCTGTG
CAATTCATGATGACCAATAAACTGGACACGGCAATGTGGCTTTCTCGCTTGTTACAGTTTAC
TGCTCTGCTCTGTTTGTCTGCCTCTTCTTGGGTTGCATGAAGCAGCAAGCCTTTACCAACGT
GCTTTGCTGGCAAATGCTCTTACCAGTGCTCTGAGGCTGCATCAAAGATTACCACACTTCCAG
TTAAGCAGAGCATTCCCTGTCCCAGGCTTTGTTAGAGGACAGCTGCCACTACCTGTTGTATTCA
CTCATCTTTGTAAATTCCTATCCAGTTACAATGAGTATCTTCCCAGTCTTGTTATTCTCTTTG
CTTCATGCTGC

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FIGURE 343

CCTGACCCAGGGTCCGGNGGCAATTTTCCATTTATGCCCTGTGGTNCGGGACATACCTAGATN
TCAGNCCATTTCCCTCCAGGTTTGGCCTTGTTTTAAGGCCCTGGGCTGGGATTNCAAGTGGCT
TGATCAACCCCCNNTTGGNCCAGTACTACCCTTAGGGNCCGTGACCNTGACTNTNTGCAGCAT
TTTCATACCTATCGGGTTGGGCGTCTTCATTCGCTACAAATACAGCCGGGGGGCTGANTACATT
GTGAAGGTTTCCCTGTGGTCTCTGCTAGTGACTCTGGTGGTCCTTTTCATAATGACCGGCACT
ATGTTAGGACCTGAACTGCTGGCAAGTATCCCTGCAGCTGTTTATGTGATAGCAATTTTATG
CCTTTGGCAGGCTACGCTTCAGGTTATGGTTTAGCTACTCTCTCCATCTTCCACCCAAGTGC
AAGAGGACTGTATGTCTGGAAACAGGTAGTCAGAATGTGCAGCTCTGTACAGCCATTCTAAAA
CTGGC

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FIGURE 344

CCTAAATAGGGCCCTGGATATATTCAACACTTCCATTGTGACTCCAATATATTATGTATTCTT
TACAACATCAGTTTTAACTTGTTCAGCTATTCTTTTTAAGGAGTGGCAAGATATGCCTGTTGA
CGATGTCATTGGTACTTTGAGTGGCTTCTTTACAATCATTGTGGGGATATTCTTGTTGCATGC
CTTTAAAGACGTCAGCTTTAGTCTAGCAAGTCTGCCTGTGTCTTTTCGAAAAGACGAGAAAGC
AATGAATGGCAATCTCTCTAATATGTATGAAGTTCTTAATAATAATGAAGAAAGCTTAACCTG
TGGAATCGAACAACACACTGG

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FIGURE 345

TTAAGTGCAAACCATGCAGTGCCCGAGGATGATACCATTAGCAATGACTCCAATGATTTACACC
GAAGTAGAAAATGGTCAGATAAATAGCAAGTTTATTTCTGATCGTGAAAGTAGAAGAAGTCTC
ACAAACAGCCATTTGGAAAAAAGAAGTGTGATGAGTATATTCCAGGTACAACCTCCTTAGGC
ATGTCTGTTTTTAACCTAAGCAACGCCATTATGGGCAGTGGGATTTGGGACTCGCCTTTGCC
CTGGCAAACACTGGAATCCTACTTTTTCTGGTACTTTTGACTTCAGTGACATTGCTGTCTATA
TATTCAATAAACCTCCTATTGATCTGTTCAAAGAAACAGGCTGCATGGTGTATGAAAAGCTGGG

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FIGURE 346

GCAGCATT CAGAGTTACTGGCTGTCATTTTTTCATGGTGATGATTTTATTTGTAGCTTTCATAA
CCTGTTGGGAAGAAGTTACTACTTTGGTACAGGCTATCAGGATAACTTCCTATATGAATGAAA
CTATCTTATATTTTCCTTTTTTCATCCCACTCCAGTTATACTGTGAGATCTAAAAAATATTCT
TATCCAAGCTCATTGTCTGTTTTCTCAGTACCTGGTTACCATTGTACTACTTCAGGTAATCA
TTGTTTTACTTAAAGTTCAGATTCCAGCATATATTGAGATGAATATTCCTGGTTATACTTTG
TCAATAGTTTTCTCATTGCTACAGTGTATTGGTTTAATTGTCACAAGCT

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FIGURE 347

ACAATGTTGGGTAAAATAATTGGGGGGGACTTTTGGGCCNTTCAGGNNTAATAGTATTAAGTC
TATGGGCAANTGGAGCCTTAGGANAATTTGGGGGGTTTTTAATCTTTTTCCTGGTGGGCTTAG
ATTTTTCTCCAGAAAAGTTAAGAAAGGTGTGAAGATTTCTTACAAGGCCCCGTGTTACATGCC
ACTGTTAATGATTGCATTTGGCTTGCTGTGGGGGCATTTCTTGCGNATCAAACCCACGCAGAG
GGTNTTCATTTCCAAGGTGTCTGTCTTTGTCAAGCACACCCCTCGTGTCCAGGTTCTCTCATG
GGCAGTGCTCGGGGTGACAAAGAAGGCGACATTGACTACAGCACCGTGCTCCTCGGCATGCTG
GTGACGCAGGACGTGCAGCTCGGGCTCTTCATGGCCGTCATGCCGACTCTCATACAGGCGGGC
GCCAGTGCATCTTCTAGCATTGTCTGGAAGTTCTCCGAATCCTGGTTTTGATTGGTCAGATT
CTTTTTTCACTAGCGGCGGTTTTTCTTTTATGTCTTGTTATAAAGAAGTATCTCATTGGACCC
TATTATCGGAAGCTGCACATGGAAAGCAAGGGGAACAAAGAAATCCTGATCTTGGAATATCT
GCCTTTATCTTCTTAATGTTAACGGTCACGGAGCTGCTGGACGTCTCCATGGAGCTGGGCTGT
TTCCTGGCTGGAGCGCTCGTCTCCTCTCAGGGCCCCGTGGTCACCGAGGAGATCGCCAC

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FIGURE 348

AAAAAAAAAAAAAAAAAAGAACCACTTCTGCCTTATCATTCTCTCTTTATTACCGAAATG
CGGAGACAGAAAGTCAACAGAGAAAGAATTGTTTTCCCAAGGCCACACAGATTGCTCCAACA
CTTGACTTTTCCTGCTAGGAACTCAATCCAAGAGATGGGCTTCTTTTGTCTCTGACTATAA
AAGGGTGTACCTTGTCAACATCTTCTATCACACAGGACCCCTATGGGCTTGTTTTGGTTTTG
TTCTTTCATCATTATTATTTGGAAAGTTATATTTCCCTTTACTGTCCTTGAGGTGTGAGGCTTC
ACCTCATCTTGTCTCCATATCCCTGAG

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FIGURE 349

TGGATCCCATGGCCAGGGNGGCGTCCAGGTGCAAACCAGTAGAACNCAAGGCCTGAACCTGGG
GCCAGACACCTTGTTTTCCCCGGCCATGGTCAAGACCNTCCAGTACNTGCCTTACTGTGGGCC
CAGAANTGGGCCAAGTCTTGGCAGCCCCGTGCCGCAGGTTGTTGTGCAGTTTGGGGTGTCTTC
TGCACCATCCTCCTTTTGCTCTGGGTGTCTGTCTTCCTCTATGGCTCCTTCTACTATTCCTAT
ATGCCGACAGTCAGCCACNTCAGCCCTGGCATTTCTACTACAGGACCGACTGTGATTCCTCCA
CCACCTCACTCTGCTCCTTCCCTGTTGCCAATGTCTCGCTGACTAAGGGTGGACGTGATCGGG
TGCTGATGTATGGACAGCCGTATCGTGTTACCTTAGAGCTTGAGCTGCCAGAGTCCCCGTGA
ATCAAGATTTGGGCATGTTCTTGGTCACCATTTCTGCTACACCAGAGGTGGCCGAATCATCT
CCTCTTCTCGCGTTCGGTGATGCTGCATTACCGCTCAGACCTGCTCCAGATGCTGGACACAC
TGGTCTTCTCTAGCCTCCTGCTATTTGGCTTTGCAGAGCAG

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FIGURE 350

AAATTTGAAACCCATAAGTTACCAAGTCTATATCAGGNGCAGTGGCTTTGATTAAAGCCCATT
TTTAAAACTTAAAAACTCAACNCNTCCCAGATTATAATAGAAAAAGAAATGGCNTCAGTTTGA
TCTCGTTCAGAATGCCCCAGATTGTTCTGCTTTGGGGCAGCTGTTTAGTTTCAGAGTTATATTN
CAGAGAATTATTTTCTGAGATAATCTTAAACTAGAATGTTCAAACTAATTGATAATTGAAGT
ATCAAGATACGTAGAACACCTCAGAGATTTTTCTTCAGGAACCTCCACAACTTTGAATCCTT
GTATCTTTATTTGGTATTCATACTACTAGTAGCAAAATACAGGTTTTTTGTTTTGTTTTGTTT
TGTTTTGGCTTCATAGAGTATCTCAAATTGAACTTTTCTGCACAAAGAATAAAATTAAGGAT
TTTATAAACTCAAATTGGCACCTACTGAATTAATAACATAAAATCATTTAAATATAATTCAG
CATATGGGAAGTAACATTGCACTAATATGGAAATCACTGCCAGAGACAGTCTATTTTCTTTTA
ATTTGTTACTACTTAGTCACAAA

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FIGURE 351

TCAGAAGGGAATGAAATCCNCAGCGGACCTGGCATCAAAAACCTTTGGGCAAAGCAATTGAATT
GNAAGCAATAAAACNGACTTTATCAAGTCCTAAATGTACAAGAGAAGAAGAGAAAATCACTTG
ACAATGAAGTTGAAAAGACAGCAAATCTTGTCATTAGCAACTGGAATCAGCAAATTAAGGCCA
AGAAGAAATTAATGGTTAGTACCAAGAAACATGAAGCACTTTTCCAGCTTGTAGAAAGCTCCA
AGCAATCTATGACTGAGAAGGAGAAGCGGAAGCTCCTCAATAAACTGACAAAATCAACTGAAA
AGTTGGAAAAGGAAGATGAAAATTACTACCAAAAAAACATGGCGGGTTATTCTACCAGACTGA
AATGGGAAAACACACTAGAGAACTGCTACCAGAGCATTCTGGAGCTGGAGAAGGAAAGAATTC
AACTTTTATGCAATAACTTAAACCAGTACAGCCAACATATTTCTCTTTTGGCCAAACCCTGA
CCACATGCCACAC

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FIGURE 352

TTTAAAGAAATGGGTAAATACTGAGCCTTTNTGCAACCTTTTTTGGAAGCACCAGCCNCAGA
AGATTCTGTGACTTGTGTGCTTTTAGGTGCACCCTCAGACNTCTGGCTCAGTACACCTCGGGN
TGATTGAGACTGTTGCCTCAGTCTCTCATTTGGGTTGACATTATTCATTTTAATGAATGAATA
CATTTGTCGCAGAAAGTGGAATTCTCTCATTTGTTGAGAGAAAATTCTCAGCTTGAGTCAAGAA
GTTTCCATATTTACCAGAACCTTCTAGCTTTGATGAGCATAATCACTGCTAAAATAATGTGTC
TTCTGAGCAGCTGGGTACCAGTGCCTGTGGCCTGTAGCATTAGTTACTGCCTGAGGGATGGTG
ACTGTTACCGCAGAATGGTGGGCTTCGTTGACTTGTCTTCTCTCCTCTCCCTCTTACCCACTT
CCCGGAGAAACAGGACAGCAGGCACAGCCAGTAACAAGCTGTGGTACGCCTCCCTGGCCCTGG
TGACGCTCATCATGTATTCCATTGCCACTGGAGGCTTGGTTTTGATGGCAGTGTT

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FIGURE 353

GTGGGCCAATGCTGTCCAACTACAGGGGGTTAATGTAAAGCTTGTGNTAACATATGAAAAGT
ATTTAGAAAGAGCTTGGCATGTAGTAACCACTCAATAAAAGTTAGCTACTATTATGAAGTGTT
TTCCAATGGTTTATTTAGAAGCAAATAGTATCAGTNTAGAAGTCCAGGCTTGTTTTTCTCCC
AAACATGTTTTCACAGTGCTTCCATGGTCTCCTTCTCCTTTTCTTCTCCTCCTCCTCTAAA
AACATATTTTGCTGTGTCTGCTTGGTCATCTTTCCTGGGCCAGAGAAAGAATCCCTGAGGGT
TGGACAAGGGGAGCAGCTGAGTTGGTGAGAAAAGGAGCCCAGCAGGTTGAATGCCTCGAACCA
CTGTGATGAGCTCTTGAGCTGGGTGCCAATCAAAGTGAAGCAGTGGGGCTTGCCAGGTGAGAT
GTTAATTTTACGACAGTCACACGTGTCCCTGTCTGGACTCTCCCTAGGACTCTTGACCCTACCCT
GCAGTGGTTTGAAATGGATTTTATTAGGCTTTCATTACATTCTCATATCATTTTTTTTCACTTG
GTATCTAAGCTACACGAGAGCCAGTGTAGTGCTTTGTCCTTG

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FIGURE 354

CCGGTAACCCATTGGGCCTGGCNTAANAAAGTTTTTTTAAGCCATTAGACGTTTTTAAAGGAA
TTGGNAGATGNCAATTGGGGAAATATTTAAAATTTAAGTAAAATATAAAGCTTCCTTATTTCA
TGTAACCCAGNCAATCTCAGTATACATGATCAGTTGTGTCTGACAGGTAAATCTATTTGAGGC
CTTATCACACGTTACTTTTAAGAAGCTAGAAAGGAAAAGTCACTGATCTTAAGTATTTATAATA
CTTCATGTGGTCTAATACTTTTTACGTTTTGTTTTGATTCAGATTTAGTCCGGATTCCCGGTA
TCTGGCAGTAGGTTCTAGTGAGAACTCAGTGGATTTTTATGACCTAACGCTGGGCCCCACTCT
TAACAGAATCAGCTACTGCAAAGACATTCCAAGCTTTGTCATTCAAATGGACTTCTCTGCAGA
TAGCAGTTATCTCCAGGTACAGTACCAATACTGTATACCCAGGTGGCAAGTTCTTCTGCTTTT
ACATTTTCGTGTTAGTGAATGCATTTAAAGTTCCTGAGCTCCAGAGCTCCAGCTTCTCAACTCC
TCCCTTTGTACCTTCTGACCTACAGCTCCTCTTTCC

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FIGURE 355

TCATGGCGGTATACTTTGGCAAGTGGTTATCTTTTAACGGGTTTCATTTTCCCAGTTGTTAAA
TTTACAGTTGGTTAANTAAAAGTTTTTCCCAGTACGANCAGGGCGTAATCANAGATCCNTAAG
TGTTTAGTNCAGGGCATGTGCTTTTAAAGTGGGNATGGCTATTTACAGATTGGCCTACACTG
TTNTGGTGGGAGCCNTCAGTGACCAAGGAGCAGAGGTACTTGAAACCCACCCTTGAAGCCATN
TGGATGCTCCGTTCAATCAAATCTGGGGTGTCTAACCCAAAGTAACTGGCCACAGACTGCAA
TGTAAGATACAAATCTTCAGGACCTAGTGTGTGCACATGTTGGCTCTTATATAAGATGGCATC
CTTAGTACTTGTTCTATGTAGAAAAGAATTTGTGGGCTCACAAGTCCCTACAGAGTCTCACAC
TCTCATGGCCAATAAGTATACAGGGATACCCGGAATTAGACAAACACAGATGAGACATTTATT
TCTGTATATGAATTTATTTATTTATTTATTTATTTTGGGACAGGGTCTCGCTCTGTGCC
CATCCTGGAGTGCGGTGGCCTGGCTCATTGCAAGCTCCGCCTCCCGGGTTTACACCATTCTGC
CTC

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FIGURE 356

TTAATTAGATAATTTAAAGTAGCGTTTTTTTTCTACAATGTNTGAAGAAGTGACCTACGCGACA
NTCACATTTTCAGGATTCTGNTGNAGCAAGGAATACCCGAGATGGAAATAACNTAAGAAAAAGA
GGGCATCCAGCTCCATCTCCCATTTGGCGTCATGCTGCTCTGGGTCTGGTAACTCTTTGCCTG
ATGTTGCTGATTGGGCTGGTGACGTTGGGGATGATGTTTTTGCAGATATCTAATGACATTAAC
TCAGATTCAGAGAAATTGAGTCAACTTCAGAAAACCATCCAACAGCAGCAGGATAACTTATCC
CAGCAACTGGGCAACTCCAACAACCTGTCCATGGAGGAGGAATTTCTCAAGTCACAGATCTCC
AGTCTACTGAAGAGGCAGGAACAAATGGCCATCAAACGTGCGCAAGAGCTAATCATTCTACT
TCAGACCACAGATGTAATCCATGTCCTAAGATGTGGCAATGGTACCAAAATAGTTGCTACTAT
TTTACAACAAATGAGGAGAAAACCTGGGCTAACAGTAGAAAGGACTGCATAGACAAGAACTCCAC

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FIGURE 357

CAAAAANAGTGCCCGTCCNGTTGTTGTAAGTGAAGGGACGGCAGTCAGTTGACCCTGCAGTGT
GCAGGCGAGCGCAGGGAGTACGCCATGTCCTGAGAAGGGGCGATTCTCAGGCTNTGGCAGTTA
CAGCTTCTCCTCACCCTGCCGAGCAACCAGGCCACGGGGCTCCGTGCATCGCCACCTAGAGTG
TTACCCTNTTCCTTGTTACGGAGGTTCTCCGCAGTGTGTGAGAAAGAGGCCCTCTCTCAGAT
GAATGGATAAAGAAAATGCAGGACATATGGGGGGAGGAGCCAAGATGGCCGAATAGGAACAGC
TCCGGTCTACAGTCCCAAGTGTGAGCGACACAGAAGACAGGCAAGAAGAATAAATGTCTCTGG
TGGAACTTTTGCTCTGGTGGAAGTGTCTTTCTAGAACTGGTGTGTCAGCATCCCTGGAAGTGT
CAGAGAGCCCTGGGAGTATCCAGGTGGCCCGGGGTCAGACAGCAGTCCTGCCCTGCACTTTCA
CTACCAGCGCTGCCCTCATTAACCTCAATGTCATTTGGATGGTCACTCCTCTCTCCAATGC

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FIGURE 358

GGTTCCTAAAGATTGAAGCTTTTTAAGACTCAGCTTTTGACACATTTACTAATTATACTTAA
TTGTTCCCTTGGTGATTTACCCCCGTGGGTTTGTTCCTTGAACTCCACACTCATTACGTTT
AGAGCCTTTTTNTACACTACTTGAATTATTTTTATTTAGGTATATAAAATACTGGTGGCAATA
GCATAAATTCTAAGTGTTAACTTGATGAAGTAATATTGTACACCTATGTAAGCACTGCCCAG
ACTGATATACATTTACAGCCTAAGGAGGCTTCTTTGTGCTGCTTTGCTATTAATATTCCATTG
CCCAGAAATAGCCCCTCTCCTAATTTCCATAACCAGAGATAAGCTTACATGTTTTTCCGCTTC
ATGTAAATGGAATCGTACGCTGAACCCTTTTTTGTGTCTGGTTTCTTTTGCTCAACATTATTT
CATGCAACAATAAGGATGGCTCTCTCAGACATAATATTCATTTTTATTTATGTAGTGTTTTAT
GGGAATTGCACTGAGTTAGAGAACTGAAGTNTGAAGGAATAGTTTCCACAAGACTGCCCTCA
TTTCAGAC

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FIGURE 359

AGTGCCGTCCCGGTGTTGTAAGTGAAGGACGGCAGTCAGTTGCCCTGCAGTGTGCAGGCNAGC
GCAGGAGTACCGCCATGTCNTAANAAGGGCGATTNTCAGGNTNTGGCAGTACAGTTTCTCCTC
ACCCTGCGAGCAAACCAGGCCACGGGGCTCCGTGCATCGCCACNTAGAGTGTTACCCTCTTCC
TTGTTACGGAGGTTCTCCGCAGTGTGTGAGAAAGAGGCCCTCTCTCAGATGAATGGATAAAG
AAAATGCAGGACATATGGGGGGAGGAGCCAAGATGGCCGAATAGGAACAGCTCCGGTCTACAG
CTCCCAGTGTGAGCGACACAGAAGACAGGCAAGAAGAATAAATGTCTCTGGTGGAACTTTTCG
TCTGGTGGAAGTCTTTTCTAGAACTGGTGTGTCAGCATCCCTGGAAGTGTGTCAGAGAGCCCTG
GGAGTATCCAGGTGGCCCGGGGTCAGACAGCAGTCCTGCCCTGCACTTTCACTACCAGCGCTG
CCCTCATTAACCTCAATGTCATTTGGATGGTCACTCCTCTCTCCAATGC

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FIGURE 360

CAAAATGTTAAGAACGTCCACTCCTAATCTGTGGGTGGTNTGCATTGCCGGGCCCCNTGGTTN
TCTTNTGGCATTNTGCTTNTGCNTCATATTCTTGTTAGGCCAGGTGGGCTTGTTGCAGGAC
ACCCCCAGTGCNTGGATTACGGGCCCCCTTTCCAGCCCCCTTGCACCTTGAGTTTGTCTCTG
ACTATGAGTCCTTCGGCTGCTGTGATCAGCACAAGGACCGCCGCATCGCTGCCCGGTACTGGG
ACATCATGGAATATTTTGATCTGAAGAGACATGAGCTGTGTGGAGATTACATTAAAGACATCC
TTTGCCAGGAGTGCTCGCCCTACGCAGCCACCTNTACGACGCCGAAAACACCCAGACGCCTC
TCCGGAATCTCCCGGGCCTCTGCTCTGATTACTGCTCTGCCTTCCATTCTAACTGTCACTCAG
CCATTTCCCTGCTGACCAATGACCGCGGCCTCCAGGAGTCTCATGGAAGGGACGGTACCCG

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FIGURE 361

CCCACGCGTCCGGCTTGAAGACTGACAAGATGTCCCTGTGGACTCCCAAACCTACTCCAGAT
GGGGAGGTGCCCTTAACACCAAGATTTTAAAAGCTCCAATTCAGAGCAAGAGTCGAAAACCTC
ACAGATAAAGTTATAGTTATTTCAGGGTTCTGAAAAGACGCAGAACATGAAGGGACTCAGAAG
TCTGGCAGCAACAACCTTGGCTCTTTTCCTGGTGTGTTTTCCTGGGAAACTCCAGCTGCGC
TCCGCAGAGACTGTTGGAGAGAAGGAAGTGGACTCCTCAAGCTATGCTCTACCTGAAAGGGGC
ACAGGGTCGCCGCTTCATCTCCGACCAGAGCCGGAGAAAGGACCTCTCCGACCGGCCACTGCC
GGAAAGACGAAGCCCAAATCCCCAACTACTAACTATTCCGGAGGCAGCAACCATCTTACTGGC
GTCCCTTCAGAAATCACC

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FIGURE 362

AATCACCCGGGTCGCTGTTCCCTNAGGTGGTCAAGGTGGACAGGGGCGGTGGTNATGGCNCAGT
TTGACANTGAATACCAGCGCCTAGAGGCCTCCTATAGTGATTCACCCCAGGGGAGGAGGACC
TGTTGGTGCACGTCGCCGAGGGGAGCAAGTCACCTTGGCACCATATTGAAAACCTTGACCTCT
TCTTCTCTCGAGTTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGCTCATCGGGGAGA
TCTTTGAGCTCATGCAGTTCCTCTTTGTGGTTGCCTTCACTACCTTCCTGGTCAGCTGCGTGG
ACTATGACATCCTATTTGCCAACAAAGATGGTGAACCACAGTNTTCACCCTACTGAACCCGTCA
AGGTCACTCTGCCAGACGCCTTTTTGCCTGCTCAAGTCTGTAGTGCCAGGATTCAGGAAAATGG

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FIGURE 363

GTCCGAACCTGAGCAAACACAGCAGCCCGAGTGTTCCCAAGGCCAAAATGCTGAGAACGTCCA
CTCCTAATCTGTGTGGTGGTCTGCATTGCCGGGCCCCCTGGCTCTCTTCTGGCATTCTCTGCC
TCTGCCTCATATTCTTGTTAGGCCAGGTGGGCTTGCTGCAGGGACACCCCCAGTGCCTGGATT
ACGGGCCCCCTTTCCAGCCCCCTCTGCACCTTGAGTTTTGCTCTGACTATGAGTCCTTCGGCT
GCTGTGATCAGCACAAGGACCGCCGCATCGCTGCCCGGTACTGGGACATCATGGAATATTTTG
ATCTGAAGAGACATGAGCTGTGTGGAGATTACATTAAAGACATCCTTTGCCAGGAGTGCTCGC
CCTACGCAGCCACCTCTACGACGCCGAAAACACCCAGACGCCTCTCCGGAATCTCCCGGGCC
TCTGCTCTGATTACTGCTCTGCCTTCCATTCTAACTGTCACTCAGCCATTTCCCTGCTGACCA
ATGACCG

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FIGURE 364

CCCACGCGTCCGTGAACACACAAAGAGCTTATTTTGTTAGGCAAATACACATTAATAAGAATG
CCTAGAAGAGGACTGATTCTTCACACCCGGACCCACTGGTTGCTGTTGGGCCTTGCTTTGCTC
TGCAGTTTGGTATTATTTATGTACCTCCTGGAATGTGCCCCCAGACTGATGGAAATGCATCT
CTTCCTGGTGTGTTGTTGGGGAAAATTATGGTAAAGAGTATTATCAAGCCCTCCTACAGGAACAA
GAAGAACATTATCAGACCAGGGCAACCAGTCTGAAACGCCAAATTGCCCAACTAAAACAAGAA
TTACAAGAAATGAGTGAGAAGATGCGGTCACTGCAAGAAAGAAGGAATGTAGGGGCTAATGGC
ATAGGCTATCAGAGCAACAAAGAGCAAGC

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FIGURE 365

TGGTTGGGGCCTCCAAGATTAGAATGTTACTAGGGCCAAAANCAGTGGGATTGGTAAAAGAGG
CAATGATACCCCCATGAGAGCNTTCACATNCAGAACCAGNCAGAACTTCAAAGGTTTTGATGA
TANCAATGATGATTTTCCTGACAATGGCAGAATGTCAATTCATTATCAAACATGAACTTGAAAA
TCTTAGAGCTAAAGATGAAAAAATGATCCCTGGTTACCCTCAGGCAAAGTTGTATCCAGGAAA
ATCATTGTTGAGAAGATTGCTCACGTCTGGCATCGTGATTCAGGTGTTTCCACTGCATGACAG
TGAAGCCCTGAAGAAGCTTGAGGACACCTGGTACACTCGGTTTGCTTTGAAGTATCAGCCCAT
AGAGAATCACAGATTGGAATCTGCCTATCAGAACCATCTAATTCTGAAAGTTTTAGTGTTCAA
CTTCCTCAATTGCTTTGCCTCACTCTTCTATATTGCCTTTGTCTTGAAAGATATGAAGCTTTT
GCGCCAGAGCTTGGCCACTCTCCTAATTACCTCCCAGATCCTCAACCG

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FIGURE 366

ATTTGATTAAATTATGAATGAGTTTTACAAATTCCTTTCAGAGTTTTACTAAGATCACACAAA
TAACAGCTTTNTTATTCAGTGAAAAAGATATTTTATTTCTGATGTTTTATTGCACTCGTGGA
ATATGTTACCATTAATCAGAAACATCATGGCAACCCCTAAGAATAGACTAAGTTTGTGTTGGC
TGAGGGATTNTATTTGGTTTGCTTTTTTTTTTGCTTTGTTATATTTTATTGCTACA

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FIGURE 367

GGCTACAAC TGCTCAACATGGGAAAAGACATTCCGGGCAGATCGGCTTTTGAAAGCTTAAAGG
GAGCTTGATGCTGGCAATGGGATCAGAGTGTTTGACNTGACATCGGGATGTTTCATTGCTAGTC
TGACCATCTGGCTCCTCTGTANAAACATTGTTTCAGAAACCTGTGACAGACGAAGCAGCACAGA
GTAACCCGGAGTTTGAAAATGAAGAATTGGCTGAAGGAGAAAAAATTGATTCAGAAGAGGCNC
TGATCTATGAAGAGGATTTCAATGGAGGAGATGGTGTGTTGAAGGCGAGTTGGAAGAAAGCACGA
AGTTAAAAATGTTCCGCAGGCTTGCCTCTGTGGCCTNTAAGCTCAAGGAGTTCATTGGCAACA
TGATCACCAC TGCTGGGAAAGTCGTTGTTACCATCTTACTGGGCTCCTCGGGCATGATGTTGC
CGTCTTG

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FIGURE 368

TTAAGCCGGAAAATCCCCTTGAACCCAGAAGCGGAAGGTNCAGTCACCCAAAATGGNGCCCAT
TGCATTCCAGCCTCGGTNCGGAGCAAGACTTTGTTTAAAAAAAAAATTAAATTAGCCATTAC
CCCTAGNTAATTTTTAAATTTTTGTGAANANAGGGCCTCACTGTCTTGCCCAGGCTGGTCTC
GAACTCCAGGCTTCAGGTGATCCTTCTGCCTTGCCTCCCAAAGGGCGGGATTACAGGTGTGAG
CCACTGTGCCCAACTCATTACTTTTTTAAAAAATTACTTTCATTTCTAGTTTATATATGACA
GGTACTTACTTTAAGTAGTAAATATTATGTTTAAACAATAAATAAAAAATGATCAGGATTTCCCC
CGACATGCTTTCCTTCTTCTCTTTTCTTCCTTCTCTCTCATTTTATCCCTTCTCCTGCCC
TTTTTGGAAGTCCTTATTGGAGGAAAAAATAACTTGCCCTATTTGTTTCCTCACTAATTGTTA
TCAGTCTCGGGTATCAAGGCAAGCAGATTCAAATTGCTGTAATATATACAGTGCAATTAGATT
AGAGTCTACTAAGAATTTAATTGGAGAATGTTCAAATACTTTTCTAAAGTTAATTTTTTTAG
TATTCA

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FIGURE 369

TAGAAGGTCCGTCATGGACCCCAGATCCATTTCTAGNAAGGCCGTCATGACACCCNNGGATCC
ATTCCTAGNAGGGCCGTCATGACACCCCGGATCCTTTTCCCCTCAGAGGGGCTNGTCATGAC
TCAGACACATCTCCTCCCAGAGGATCCGTCATGACTCCTCAGACACTTCACCCCCAAGGAGGG
CCCGTCATGATTCTCCAGATCCTTCTCCCCCAAGGAGGCCCTCAGCATAATTCTTCAGGTGCAT
CTCCTAGGAGAGTCCGTCATGATTCACCAGATCCCTCTCCTCCTAGGCGAGCCCGTCATGGTT
CCTCAGATATCTCTTCCCCCAGAAGGGTCCATAACAACCTCCCCTGACACATCTAGGAGGACTC
TTGGCTCTTCAGACACACAGCAACTCAGAAGGGCCCGTCATGACTCCCCTGATTTGGCTCCTA
ATGTCACCTTATTCCTG

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FIGURE 370

CGGANGCGTGGCCGAACGCNTGGTCCAACCATATGCCAGGTTCAACNCGGATAAAAGTTAGGA
AACGTAACCAGCTTCATTTTTTTGNCAGCAGACTTAAAGATCTGAACTTGGAACATAATCA
AGGATTTATGTGCTGCTCTTTGGATTCTGATGAAGAATCCAGTGCTCATATGCCTAGCTCTGT
CAAAAGCTACAGAATATTTAGTTATTATTGGAGCTTCTGAATTTTGCCTATATATTTAGAAA
ATCAGTTTATATTAACACCCACTGTGGCAACTACACTTGCAGGACTTGTTTTAATTCAGGAG
GTGCACTTGGCCAGCTTCTGGGAGGTGTCATTGTTTCCACATTAGAAATGTCTTGTAAGCCC
TTATGAGATTTATAATGGTTACATCTGTGATATCACTTATACTGCTTGTGTTTATTATTTTG
TACGCTGTAATCCAGTGCAATTTGCTGGGATCAATGAAGATTATGATGGAACAGGGAAGTTGG
GAAACCTCACGGCTCCTTGCAATGAAAAATGTAG

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FIGURE 371

AATAAAAAATGGCTTAAAAGAACATTTCCGAACCAAAGGAACCGGTTCCNGCCTTAACAAAG
TGGGACATTGGCCNTCAAAGGGGNCCTCATGGGAACATCNTGTTTTGCGGGGGCANGCACAAT
GGTCAAGGGCTTCCCTAACCGTTTGCANAAGNAGTTAANCAGCATGTGTCCCAATGNCCCCG
CAGGTAAACGTGCTGCCTGAAANAGCCAGTCCGTGTGGACCGGGGCTCCATCCTGGCCTCATT
CAGGGTTTCCAACCATTGTGGGTCCACCGCTTTGAGTACGAGGAACACGGGCCTTTCTTCCTC
TACAGAAGGTGTTNTGAACGGCGACAACCTTTGGCGTCGTGAGATTCTTGTGAGGCGTCTGCCT
GGAAGCCGGCAGCAATTTTTGCTTCTTTAAAGAGAAAAAGAAGGCTAGGGACTCAGATTCCTG
GATTCTGAGATCCAGACCAGCTCCTCCCAGACCTNTCCAGAAGAAGCCATGGGAACCCCTCGT
ATCCAGCATTTGCTGATCCTCCTGGTCCTAGGAGCCTCCCTCCTGACCTCGGGCCTAGAGCTG
TATTGTCAAAGGGTCTGTCCATGACTGTGGAAGCAGATCCAGCCAATATGTTTAACTGGACC
ACAGAGGAAGTGGAGACTTGTGACAAAGGGGCACTTTGCCAGGAAACCATACTAATAATTAA

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FIGURE 372

GTGCGCATAAAGAGGAGGCGCTTGCCTTCAGCTTGTGGGAAATCCCGAAGATGGCCAAAGCAA
CTCAACTGTTTCGTTGCTTCCAGGGCCTGCTGATTTTTGGAAATGTGATTATTGGTTGTTGCGG
CATTGCCCTGACTGCGGAGTGCATCTTCTTTGTATCTGACCAACACAGCCTCTACCCACTGCT
TGAAGCCACCGACAACGATGACATCTATGGGGCTGCCTGGATCGGCATATTTGTGGGCATCTG
CCTCTTCTGCCTGTCTGTTCTAGGCATTGTAGGCATCATGAAGTCCAGCAGGAAAATTCTTCT
GGCGTATTTCAATTCTGATGTTTATAGTATATGCCTTTGAAGTGGCATCTTGTATCACAGCAGC
AACACAACGAGACTTTTTCAC

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FIGURE 373

TTTAAGGATGTTGCCATGNACCATGTTTTTTCAAATTTGCTTTTCATTTGGGNCCGTTTTGGA
GTCTTTGACCGCTANGATGGTTTTTCGTCTGCTGGGAACCTTGATCAGACTTTGAAGATTNTAAA
TTTGGAAGATCAGGGTGCACTTTTGAGTGATGATGAAATATTTGTAGCCGCCAAATTGGGAAA
CATACCTGCATGGCCTTGCGCAAATACTTTGAGGCTCACCTGGCCATTAAATTGGAACAAGTG
AAGCAGTCACTTCAGAGGACTGAGGGTGGCATTTNTTGTCCACCCACAACCCCGTACAAGGCA
TGCTCATATACTCATGAACAGATTGTGGAAATGATGGAATTTTGTAGATAATATGGCCCAGCG
CAGCTATATTGGGAACCAGCTGAAGTTTTCTCAAACCTTTNTTGTGTGCAACTCTTGTTGCAG
CTTATTTNTATTGCCTGCAATTGGAAGACCTATTATGCAAGGAATGACACTGTGCGCTTTGCT
TTGGATGTCCTGGCTATTCTTACTGTGGTGCCAAAAATCCAGCTCCAGTTGGCAGAATCAGTG

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FIGURE 374

AAATTTTTTAAAAAACTCCTTAATAGGCCCTTTTTTTTTTTAACCTGAAAGTTGACTACCTA
CCTTTCAGGAAATATATATTTTTTGGGTTTAGCTAGGTTGACTTTCCTCTAGAAATGGAAAAG
ATGGCACCCCTCGGTACCAAAGTGCTGGGACTCTGCACTATGCTTGTGTGTATGTGTGTGCCTC
TGTCTTGCTCTCTTATCTCCCAGCAGTGAGACATTGGACGTGTTTGCTCATGAAGATGCAGTA
TATGGCTTGTCTGTGAGCCCAGTGAATGACAACATTTTTGCCAGTTC

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FIGURE 375

TTTTTTTGGGAGGAGGAATGTNCATTTCAGGGAGTAGCTTTTTGGGAAAAATTNTNTAGGGCTA
CANACAGTCATGGGTGACTTTCTTTCTGCTGTGAAACTCCCAGAGTNTCTTTAGGGATTTTC
CCTAAGGTGACCACCAGGCACACCTCAGTNTTTTTGACCCAGAGCCTGAAACTGTTTTCANT
GGGTTCCACCAGTCCCAGCAAATCCTCTTTGTATTTATTTTGCTAAGTTATTGGGGTTTTGC
TTACATCTCATGATTGATATAATAACCAAAGTTCTATAGCCTTNTCTTGCAGTATTTGGATTG
CTTGAAACCGGGAAACTGTTCCCATTAGGCTTGTTAATGTCAGAGTGACACTATTATGAATC
TTTCTCTCCCTTTCCCTCGGCCTGTTTCTTCTCTCTTTCTCCTTCAAACCTTGCTCTGCAGCTAA
GGAAGGTGAGTCTACTTTCCCTGAGGCTTTGGGGTCAGAGTATATGTTGTTTGGAGAAAGAGG
GCAATCAGGACTNTTCTGGGACCCAGATGAGTTCTTCACTAGCCCTTNTGAA

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FIGURE 376

AAATGTTACCCTATCCTCGGANAAGGGTTTGAATCCCNCTGATGTGTGTGGATCCATTTTGGT
GGTGNCAATGATTCTCTCGTCCTATTTTATTAAC TTCATCTACCTTGCAAGAGCACAAAAAA
CCATGCTAACTTTAACTTTGGATGTGCAATTACATTCCTCCTTGTTGCAGGGACATTTTTTCC
ANANAGNTCCAATCCTGGTTAATCCGAAGCCAAAGAGAGTGTTTCTTCAGCATATGACTAGAA
CATTCCATGACTTGGAAGGAAATGCAGTTAAACGGGACTCTGGAATATGGATCAATGGGTTTG
ATTATACTGGAATTTCTCACATAACCCCTCACATTCCTGAGATCAATGATAGTATCCGAGCTC
ACTGTGAGGAGAATGCACCTCTTTGTGGTTTTCTTGGTATCTTCCAGTGCACTTTCTGATCA
GGAAAACTGGTATCTTCCTGCCCCAGAAGTTTCTCCAAGAAATCCTCCTCATTTCCG

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FIGURE 377

TTTGACTGGGTGTAAGAATATGCTGTTCCAGCAGACCAAGGATGGCATTGGGAAATCTGCNTN
TGGGGTAGGCACATCTTCATGGGCTATTTGGAAAGTGAGACTTGAAACTACAGAGGCCATCGA
TGATGAAGGCTGGTTACACTCTGGGGATTTGGGCCAGCTGGACGGTNTGGGTTTCCTCTATGT
CACCGGCCACATCAAAGAAATCCTTATCACTGCTGGTGGTGAAAATGTGCCCCCATTCCTGT
TGAGACCTTGGTTAAGAAGAAGATCCCCATCATTAGTAACGCCATGTTAGTAGGAGATAAACT
GAAGTTTCTGAGCATGTTGCTGACGCTGAAGTGTGAGATGAATCAGATGAGCGGAGAACCTCT
GGACAAGCTGAACTTCGAGGCCATCAACTTCTGTCGGGGTNTGGGCAGCCAGGCATCCACCGT
GACTGAGATTGTGAAGCAGCAAGACCCCTGGTNTACAAGGCCATCCAGCAAGGCATCAATGC
TGTGAACCAGGAAGCCATGAACAATGCACAGAGGATTGAAAAGTGGGTCATCTTGGAGAAGGA
CTTTTCCATCTATGGTGGAGAGCTAGGTCCAATGATGAAACTTAA

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FIGURE 378

GTGGAGGAAGAAGACATTATACAAAACAAATTTAGAAACTGGGATCATGAGTGGAAAAACAAA
GGCAAGAAGGGCTGCCATGTTTTTTAGACGTTGCTCTGAAGACGCCAGCGGTAGCGCCAGTGG
CAATGCTTTGTTATCAGAGGACGAAAATCCTGATGCGAATGGGGTAACTCGATCATGGAAGAT
TATTNTAAGTACAATGCTTACACTGACTTTTCTTCTTGTAGGACTCCTAAATCATCAGTGGCT
TAAAGAAACAGATG TTCCTCAGAAATCCAG

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FIGURE 379

AGÇCAAATCCTTGGCCAAATTTNGCATTTCCAANTCCGGAGGCCAAGAAAGGAAGAAAGTTC
CCCAGGTNGAAAANCAAACCTTGGATTTTCAGCAATATGGATTTATTAATCAAATGTGGTTACC
ATTTGGGCCCTTCCGGGGGATTTTAAGTACTTTTCCATACCTAGCTNTTATACATACTATTAT
TCTCATGGCAGTAGCAACTTTTGGTTCAAATATCCCAAACATGCTCAAAAGTAGAACATTTT
GTTTCAATATTAGGAAAGTGCTTTGAATCCCCTTGGACGACAAAAGCGTTGTCTGAGACAGCA
TGCGAAGACTCAGAGGAAAACAAGCAGAGAATAACAGGTGCCCAGACTCTACCAAAGCATGTT
TCTACCAGCAGTGATGAAGGGAGCCCCAGTGCCAGTACACCAATGATCAATAAAACTGGCTTT
AAATTTTCAGCTGAGAAGCCTGTGATTGAAGTTCCCAGCATGACAATCCTGGATAAAAAGGAT
GGAGAGCAGGCCAAAGCCCTGTTTGAGAAAGTGAGGAAGTTCCGTGCCCATGTGGAAGATAGT
GACTTGATCTATAAACTCTATGTGGTCCAACAGTTATCAAAACAGCCAAGTTCATTTTTATT
CTCTGCTATACAGCGAACTTTGTCAACGCAATCAGCTTTGAACACGTCTG

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FIGURE 380

CGGATCCTTTAAAATCCCTGACCTNGACCCAAGGGTCCGGTAAAATCAATTTGTNTTACCCAA
AGACCAATTTTTGACATATCTTGAATAGGATGNCTATAAATTATGACTTTTAAATTGTTGTAA
TTTTTGTA CTATTATCTGANATTTTTATTTTTATGNATTTTCGTAAGTAGTTTAGAGATAGTC
ACATTTTAAAAATCTAAGATCAAGCAAATGAAGCTTATTTTTATGTATTCATAGTATAAAAGC
CTTCAGTAAATAGGTAATATTTTTGTTTTATTCTAGAAAACAGCTCCTTGAACACAGTGAGCT
GGCTTTTCACACATTGCAGTTGTTAGTGTTTACTGCCCTTGCCATTTTAATTATGAGGCTAAA
GATGTTTTTGCACCGCACATGTGTGTTATGGCTTCCTTGATATGCTCTCGACAGCTCTTTGG
CTGGCTTTTTTCGCAGAGTTCGTTTTGAGAAGGTTATCTTTGGCATTTTAACAGTGATGTCAAT
ACAAGGTTATGCAAACCTCCGTAATCAATGGAGCATAATAGGAGAATTTAATAATTTGCCTCA
GGAAGAACTTTTACAGTGGATCAAATACAGTACCACATCAGATGCTGTCTTTGCAGGTGCCAT
GCCTACAATGGCAAGCATCAAGCTGTCTAC

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FIGURE 381

GAATAAGTTGGGATTTTTNAGCAAGGATTCCAATNTGATTCTTAAAAAAGGAGTTAGCCATAA
AGCCAGTGGTTTTAATTAGATTCAGATTTGATTTTTAAATTTTACGGGTTTCAGNTTCAGGGA
ATGCTACCCNCAAAATGAGATTTCACTACTATATACCAGTGAAATTTCTACTCTCANATTTTC
TGTAATGTCATTTTTTCATAGTTAGGTTTTAGAAAGTATCTAATCAGGTTGTGATGGTCAAATA
AAGGGTTCAAACACATTTCTATTTTCTGNNTTCAATAAATATTTTTTATATTGCTTATTCTTAT
CTATCTTTACCTAATTTCTTCCTATCTTTTTTCGNCTAACTTTCTTTTTTTTTATTTTCTTCTAA
TGAAGATTCTGCTTTCTTCATCTAAACCTGTCCCAAAAACCTATGTACCAAAACTTGGCAAGG
GTGATGTAAAGGATAAGTTTGAAGCCATGCAGAGAGCCAGGGAAGAAAGAAATCAAAGGAGAT
CTAGAGACGAAAAACAAAGAAGAAAAGAACAATATATTAGAGAGAGAGAATGGAACAGGAGAA
AGCAGGAGGTTATTTTATTTTACTTTATTCTCGTGAAAATATTTGTTTGCATTTTTTCATTTA
AATTGTATTTATTCACATTAAC

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FIGURE 382

GTCCATGGAGCTGGTGGTCAAGGTGGACAGGGGCGGTGGTGATGGCGCAGTTTGACACTGAAT
ACCAGCGCCTAGAGGCCTCCTATAGTGATTACCCCCAGGGGAGGAGGACCTGTTGGTGCACG
TCGCCGAGGGGAGCAAGTCACCTTGGCACCATATTGAAAACCTTGACCTCTTCTCTCTCGAG
TTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGCTCATCGGGGAGATCTTTGAGCTCA
TGCAGTTCCTCTTTGTGGTTGCCTTCACTACCTTCCTGGTCAGCTGCGTGGACTATGACATCC
TATTTGCCAACAAGATGGTGAACCACAGTNTTCACCCTACTGAACCCGTCAAGGTCACTCTGC
CAGACGCCTTTTTGCCTGC

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FIGURE 383

GGATGGGAAGGATCGATTAAAGGATTGGCTTTTGGAANACTTACTGGTGGGAATAAGGTTGGC
CTTGTGCAAAGTCCCCAAGGCNTGACATTAGTTTGCTGGCAAGGCAATTGATTCCTCNTTTCA
ACATCGCTTATGCAGCTTTCTGTTCTTCGGTAATCTATGAATTTTTGGATCGTGTCATCAAAT
GTCCATTGGTTCCTTCTTCCTGGTGAGTGCTCTGCTGATCAACGTTCTGAAAGTGAGCCCATT
CAACAACGGTCAACTGGTCATGGGATCTTTCGTCAAGAATGAGTTTTCGGCCCCCTCCTACCT
TATGGGCTATAATAAATCCTTGAGTGTGGTGGCAACCACAACCTTTTCTGACTGGGATTATTCA
GCTAATAATGGGCGTATTGGGTTTGGGCTTCATTGCCACTTACCTTCCGGAGTNTGCAATGAG
TGCTTACCTGGCTGCTGTGGCACTTCATATCATGCTGTCCCAGCTGACTTTCATCTTTGGGAT
TATGATTAGTTTCCATGCCGGTCCCATCTCCTTCTTCTATGACATAATTAATTACTGTGTAGC
TCTCCC

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FIGURE 384

TGTTTATGTCACCTACCTTCNCCTTTTAAAGTTTTGTCCNAGCAAACCTTGCAGAATTTTAGA
TGAACATGGNAAAAATGTTACAATCTGTGGGCCTGACTTTGGTCAAGACCTGTACANAGATGA
AAACTTGGTGACTATACTGGGGACCAGCTTCTTAATCGGATGTATCTTGTATTTCATGTTTGAC
ATCAACAACAAGATCGAGTTCTGACGCTCTGCAGGGGCGATACGCAGCTCCTGAATTGGAGAT
AGCTCGCTGTTGTTTTTGCTTCAGTCCTGGTGGAGAGGACACTGAAGAGCAGCAGCCGGGGAA
GGAGGGACCACGGGTCATTTATGACGAGAAGAAAGGCACCGTCTACATCTACTCCTACTTCCA
CTTCGTGTTCTTCCTAGCTTCCCTGTATGTGATGATGACCGTCACCAACTGGTTCAACTACGA
AAGTGCCAACATCGAGAGCTTCTTCAGCGGGAGCTGGTCCATCTTNTGGGTCAAGATGGCCTC
CTGCTGGATATGCGTGCTGTTGTACCTGTGTACGCTGGTCGCTCCCCTCTGCTGCCC

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FIGURE 385

AACAGGGGGGCGCTTGNTCCAGAAATGTTTCCCCTGGGGAAAGTGGCATCACTTAATGACAT
TCAGCCAACTTACNGAATCCTGAAACCATGGTGGAATGTGTTTATGGATTACCTAGCTGTTGT
TATGTTAATGGTAGCCATCTTTGCAGGAACCATGCAACTTTACCAAAGATCAGGTGGTCTGTT
TGCCAGTATTGCCATCTCCTGTAAATTCAAAGGCACATACACCACCAGGAAATGCCGAGGTCA
CCACCAACATCCCAAAGATGGAAGCAGCCACCAACCAAGACCAAGATGGGCGGACAACAAACG
ACATTTTCCTTTGGGACATCTGCTGTGACACCTGACATACCTCTCAGAGCCACATATCCTCGCA
CAGATTTCGCACTTCCAAATCAGGAGGCAAAGAAAGAGAAGAAAGATCCAACAGGTCGAAAAA
CAAACCTGGATTTTCAGCAATATGTATTTATTAATCAAATGTGTTACCATCTGGCCCTTCCGT
GGTATTCTAAGTACTTCCATACCTAGCTCTTATACATACTATTATTCTCATGGTCAG

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FIGURE 386

ATCAAGTTGGTGAAGAAAGAACCTATGAAATCTGTACAAAAGATTGGGGCTTTGTTCTTCCTG
TTAAGTGGTGTACTGGTGATGACCGGAAGCATGGCCTTGATTGTTTTGGATTGGGTACACAAT
GCACCTGGAGGTGGCCATTAATTGGCACCCTCAAACCTCAAACCTCAGTCCATCTGATGCCAGT
GTTGAGTAAACTCAACTACTATGAAATTTACCTAATGTTTTCAGTTTCACTTCCTTTTGAAG
TGCAGATTCCTCG

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FIGURE 387

TGGATTTAATGGGGGGAAAGGGCGGAAAANGGNCAAGGATCCAAACTGGNGAATTTGGTGATT
TTCGGGTCCCTNTCCGCTTTCCGGCCGGNCAGCGCTGCCAAGGGTATATTTCCCTTTTTTCNGA
TCCTGCAACAAGCCTCTTTAAACTGTTTAAATGAGAATGTCCTTGGNTCANAGAGTACTACTC
ACCTGGCTTTTCACTACTCTTCTTGANCATGNTGGTGTTGAAANGGATGAGAAAGNCCTTG
GACTGGTTCCTCATATTCATTCCAGTTGGAAANTTGANACTATCCTTCTTGTCTGCTGATTG
TGAAAATGGNTGGGCGGTGTAAGTCTGGCTTTGACCCTCGACATGGATCACACAATATTAAAA
AAAAAGCCTGGTACCTCATTGCAATGTTACTTAAATTAGCCTTTTGCCTCGCACTCTGNGGTA
AACTGGAACAGTTTAC

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FIGURE 388

GTTAGGTGATCCAGGTTTTGGGGTTTTTGCAACCCTTGGGGTCATTGGGCCCTTNAAATTAAT
CTTCGGGGGGGGTCCCTNGCCATGGNCAGCCAAACATTTTTGGGNACATAACCATTTGGTTCTGT
AATCGGGGCGTTTTCAGTTTCCTGTGTAAAGGGCNTGGGCATTGCTATCAAGGANCTGTTTGC
AGGGAAGCNTGTGNTGCGGCATCCCCTGGNTTGGATTCTGCTGNTGAGCCTCATCGTCTGTGT
GAGCACNCAGATTAATTACNTAAATAGGGCCCTGGATATATTCAACACTTCCATTGTGACTCC
AATATATTATGATTCTTTACAACATCAGTTTTAACTTGTTTCAGCTATTCTTTTTAAGGAGTGG
CAAGATATGCCTGTTGACGATGTCATTGGTACTTTGAGTGGCTTCTTTACAATCATTGTGGGG
ATATTCTTGTTGCATGCCTTTAAAGACGTCAGCTTTAGTCTAGCAAGTCTGCCTGTGTCTTTT
CGAAAAGACGAGAAAGCAATGAATGGCAATCTCTCTAATATGTATGAAGTTCTTAATAATAAT
GAAGAAAGCTTAACCTGTGGAATCGAACAACACACTGGTGAAAATGTCTC

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FIGURE 389

AAAAAAAAAAAAAGAATNTGACTATATACCATGGAAAAGCCNCCACTNTGCCACTTAAATA
AACATCAGGATCAGAGATTCCAAGAGGACAATNTGCATCAAGTNTTCACCAAGTGTTTTTTAA
GCGAAATAATGAAATAGGGAGCAGAATATGCCTGTTGCCCATAGAAACGAGGTNTATTNTTGT
CCTCAATTAGGCTTTTTTTTTTNTTCATAGTTACACCAGAACTAAAGTAAAAGTGGTTTTTCTG
TTCTTTCTACTTCTCCCATGAAATGGGCATATCATNTCAACACTTCACTCCAAGTCGCCACG
GGCAACCTTATGACCCTAGGTCCTCCACCCCTAATGTATCATCATTGCCA

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FIGURE 390

AGGGCGCCCATTTTCGAGCCCAAGTTTCCAGTTCGGGTTTCCGGGCTCAGAATTTTCCAGGAGT
GGGTTCTTGGGCAGTGGCTGTGGAGCAGGAATGGCGCAGTAGAGGGTTACTGTTTCTCGGCCG
CCTTGAGCTGTACCTTTTTAGTGTCTGCCTCCTTTTCTCCGCCTTCAGCCGGGCGCTGCGAG
AGCCCTACATGGACGAGATNTTCCACCTGCCTCAGGCGCAGCGNTACTGTGAGGGCCATTTCT
CCCTTTCCCAGTGGGATCCCATGATTACTACATTACCTGGCTTGTACCTGGTGTGAGTTGGAG
TGGTCAAACCTGCCATTTGGATCTTTGGATGGTCTGAACATGTTGTCTGCTCCATTGGGATGC
TCAGATTTGTTAATCTTCTCTTCAGTGTTGGCAACTTCTATTTACTATATTTGCTTTTCCACAA

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FIGURE 391

CCAGTTTTTCATGGACATAGAAAATTCCAAAAGAATAATAATATTGAATTTAAATTTGGGGGG
GTTAAAAAANAAAACCTTAACCTTTATAAAATTATTTATTNTATTTTAAGCCTTNTATCATATT
TTCCCCATCCAATTGTTTGGTTTCAGTGGTCCAGCTTTTATTTACAGGCATATAAAAGAAATT
GTGAGATGTTTTGCAAGCTTTTTTTTACTTTGAGAGCTTTTAATTTGTATGTTTTTATGTGGA
TGAAGAGCATTTTTTATGTTTTTGTGCAATAGGTTCCAATATGCATTTATTAGACATCTGTTT
AAATGGTAATGTAGCATTTATTTTGTCTAAATTGAAAGGGAACATAGATGGAATTCCAAATAT
GTACATTCAGCTGTTTGGTTTTTCGTTTTTCATTGTTATTATTGTGAGAATGCTGTTATTGGG
GTTGTGTGTGAGTGCCCGTCAGCCAGTGATGCCTCGGGCCACGCTGTGGGGCCACCTCAGTCC
TGCTGGGTCCTGGTGCCTTGGACCCACGTGCTTGTGGCCAGGCTGCCCCTGGGCGGGGCCAT
GTGGCCTCAGACCACAAGAG

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FIGURE 392

CGTCTCCAGTCTACCTCCGAGAGATTAGCTGAAACACAGAATATAGCGCCATCATTCGTGAAG
GGGTTTCTTTTGCGGGACAGAGGATCAGATGTTGAGAGTTTGGACAAACTCATGAAAACCAAA
AATATACCTGAAGCTCACCAAGATGCATTTAAAACTGGTTTTCGGAAGGTTTCTGAAAGCT
CAAGCACTCACACAAAAACCAATGATTCCCTAAGGCGAACCCGTCTGATTCTCTTCGTTCTG
CTGCTATTCGGCATTTATGGACTTCTAAAAAACCCATTTTTATCTGTCCGCTTCCGGACAACA
ACAGGGCTTGATTCTGCAGTAGATCCTGTCCAGATGAAAAATGTCACCTTTGAACATGTTAAA
GGGGTGGAGGAAGCTAAACAAGAATTACAGGAAGTTGTTGAATTCTTGAAAAATCCCGAACCC
CTT

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FIGURE 393

GGTCAAGTTCAGTAGTGGTCTCAATAAGTGTGTTAACTTGCTTTGGGTGATTGCAATCAGCA
TGGGATTTGGCCATTTCTATGGCCCAATTCANATTCAGAAGCGTCNACAGTTAGTCAGAAAGA
TACATGAAGATGAATTGAATGATATGAAGGATTATCTTTCCCAGTGTCAACAGGAACAANAAT
CTTTTATAGATTATAAGTCATTGAAAGAAAATCTTGCAAGGTGTTGGACACCTANTGAAGCAG
AGAAGATGTCCTTTGAAACTCAGGAACCCCTT

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FIGURE 394

GCAGTGGGTGATCATAGGCACTAACCCTCAAACCTCCTGAAGTTCAANAGATTGTCCCATGTCA
GCCTCCCAAGTAGCTGGGACTATAGACAGGNGCCATCATGCCAGCTAATTATTTTTTTAATT
TTANAGAAGAGTCTTGCTAGGTTCCCCAGGCTGGTCTCGAACTCCTGACCTCAAATAATCCTC
CCNCCCTCAACCTCTGAAGTAGCTGCAATGACAGGTGCAAGCCCACTGTGTTTGGCTAGAGTC
TCATGTTTTTCTAATTCCAAAAAGTTCCATAATGATTTTGATTCAGATTGTATTGAGTTTAC
ACATTAATTTAAGAAGTGACATCTTCATAATACTAACTTTCCCCAAAAAGAAACAGGGTATGT
TTTTCCATTTATATGAGTGGGGTTTTTTTTGTTTTGTTTTTACGTTTTGTAGTTTTCTTCATA
TAGGTTTTGCCAGAGGTTCCCAAACCTTCTTGTTTCATGG

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FIGURE 395

AGCATGGGAAAGGTAGGAACCNAGGGAAAGGGGCCCCCGAGCGCAAGGTGTCGGTGCCCACC
TTCAGNTGGAGGAGATTCAAAGCATAACCTGCGCACCGACAGGTGGCTGGTCATTGACCGCA
AGGTTTACAACATCACCAAATGGTCCATCCAGCACCCGGGGGGCCAGCGGGTCATCGGGCACT
ACGCTGGAGAAGATGCAACGGATGCCTTCCGCGCCTTCCACCCTGACCTGGAATTCGTGGGCA
AGTTCTTGAAACCCCTGCTGATTGGTGAAGTGGCCCCGGAGGAGCCCAGCCAGGACCACGGCA
AGAACTCAAAGATCACTGAGGACTTCCGGGCCCTGAGGAAGACGGCTGAGGACATGAACCTGT
TCAAGACCAACCACGTGTTCTTCCTCCTCCTCCTGGCCCACATCATCGCCCTGGAGAGCATTG
CATGGTTCACGTGTCTTTTACTTTGGCAATGGNTGGATTCCCTACCCTCATCACGGCCTTTGTCC
TTGC

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FIGURE 396

AATGGTACAACAGTCCCTTAATGGTTGCCNCAATGGCNTGAAATCCAAGNATTACAGACTTTT
GTGATAAGGTNAAGCTTGGGGCATCGTCCTAGAAACGGTGGCCACAAGTGGGGTTGTGACCTC
GGTGGCCTTCATGCTCACTCTCCCGATCCTCGTNTGCAAGGTGCAGGACTCCAACAGGCGAAA
AATGCTGCCTACTCAGTTTCTCTCCTCCTGGGTGTGTTGGGCATCTTTGGCCTCACCTTCGC
CTTCATCATCGGACTGGACGGGAGCACAGGGCCACACGCTTCTTCCTCTTTGGGATCCTCTT
TTCCATCTGCTTCTCCTGCCTGCTGGCTCATGCTGTCAGTCTGACCAAGCTCGTCCGGGGGAG
GAAGCCCCTTTCCCTGTTGGTGATTCTGGGTCTGGCCGTGGGCTTCAGCCTAGTCCAGGATGT
TATCGCTATTGAATATATTGTCCTGACCATGAATAGGACCAACGTCAATGTCTTTTCTGAGCT
TTCCGCTCCTCGTCG

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FIGURE 397

GACCTCGACCCCAGGGTCCGGTTNTACTTTGTCCTGCCTGCTGCTGGGGTCCCTGGGTCTATG
TGCATCCTCTTCACTATCTACTGGATGCAGTANTGGTGTGGGGCTTTGCCTGGAATGGCAGCA
TTTACATGTTCAACTGGCACCCAGTGCTTATGGTTGCTGGCATGGTGGTATTCTATGGAGGTG
CGTCACTGGTGTACCGCTGCCCCAGTCGTGGGTGGGGCCCAAAGTGGCCTGGAAACTCCTCC
ATGCAGCGCTGCACCTGATGGCCTTCGTCCTCACTGTTGTGGGGCTGGTTGCTGTCTTTACGT
TTCACAACCATGGAAGGACTGCCAACCTCTACTCCCTTCACAGCTGGCTGGGCATCACCCTG
TCTTCCTCTTCGCCTGCCAGTGGTTCCTGGGCTTTGCTGTCTTCCTCCTGCCCTGGGCGTCCA
TGTGGCTGCGCAGCCTCCTAAAACCTATCCACGTCTTTTTTGGAGCCGCCATCCTCTCTCTGT
CCATCGCATCCGTCATTTTCGGG

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FIGURE 398

AGAGGAGCTGCCGGTGCCTCCTCAGAACATCTCCTGATCGCTACCCAGGACCAGGCACCAAGG
ACAGGGAGTCCCAGGCGCACACCCCCCATCTGGGTCCCCCAGGCCCAGACCCCCACTCTGCC
ACAGGTTGCATCTTGACCTGGTCCTCCTGCAGAAGTGGCCCCTGTGGTCCTGCTCTGAGACTC
GTCCCTGGGCGCCCCCTGCAGCCCCCTTCTATGACTCCATCTGGATTTGGCTGGCTGTGGGGAC
GCGGTCCGAGGGGCGGCCTGGCTCTCAGCGTGGTGGCAGCCAGCTCTCTGGCCACCATGGCAA
ATGCTGAGATCTGAGGGGACAAGGCTCTACAGCCTCAGCCAGGGGCACTCAGCTGTTGCAGGG
TGTGATGGAGAACAACTATGTACCTACACACCGTCAGCGACTGTGACACCAGCTCCATCTGT
GAGGATTCCTTTGATGGCAGGAGCCTGTCCAAGCTGAACCTGTGTGAGGATGGTCCATGTCAC
AAACGGCGGGCAAGCATCTGCTGTACCCAGCTGGGGTCCCTGTCGGCCCTGAAGCATGCTGTC
CTGGGGCTCTACCTGCTGGTCTTCCTGATTCTTGTGGGCATCTTCATCTTAGCAGTGTCCAGG
CCGCGCAGCTCCCCTGACGACCTGAAGGCCCTGACTCGCAATGTGAACCGGCTGAATGAGAGC
TTCCGGGACTTGACAGCTGCGGCTGCTGCAGGCTCCGCTGCAAGCGGACCTGACGGAGCAGGTG
TGGAAGGTGCAGGACGC

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FIGURE 399

ATCCTGGACTTGACCCAGGNGTCCGTTGATTGGAACCGGTGGTCGGCAAAACAAGTCCGCTGG
GCAGCAGGAGNAGCAGNAGGATTATTAAATAACGCAGTTGGACTCTGGCAACTGGGAGTGAAG
AGGAGCCCAACAGCCGAGAAGGGAAGGAGGCANAGGAGGGGGACCAGAAGGACACCCCCGTGC
CCCGAAGACATAAATCCCTGAGTGCCCGGGAGGAGCCTTAACAAGCGCACGGAGCCCTCAAGG
TGCAAAGTTGGCTTTCACAGTGCAAGCCTTTGATTCCCAATGGGGGACTCAGGATCAAGACGA
TCTACCCTGGTCTCCCGGTTGCCAATATTCAGAAGAAGTATTAACAGAAGACATGATTCTCTT
CCTTCTTCACCTTCTTCCAGTAATACAGTTGGTGTCCACAGTTCCTCTCCTTCCAGCACTAAC
TCAAGCTCAGGTAGCACAGGTAAACGGAGGAGCATATTCCGTACTCCTTCCATTAGCTTCCAC
CATAAGAAGGGGAGTGAGCCTAAGCAAGAGCCTACCAACCAG

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FIGURE 400

GGCTTCCCTCGCGCCCCACCGNCCTNTTCCGGAAGGCGGCTCCCTCCCTGCGCAGCCCGGAGC
CCCTGAGATCAGCCTCGAGCAGGCGCCCGAGCGAGACTATCCCTAAACGGGAACGGCGGTGGC
CGACTCGCGAGTGAGGAAAAGAAGGAAAGGGCAGACTGGTTCGCGAAGAGAAGATCCAGGCCTC
AGAGGAGGAGAAAGGCCGGAGCCAGCCGAGCTGTCACGACCGGAGGGGGGACTCGCAGCCTTA
CCAGGGGGGTGATGTTTTACAGGCACTTAAGTATTCATCGAAGAGTCACCCAGTAGCGGTGA
TCACAGACATGAAAAGATGCGAGACGCCGGAGATCCTTCACCACCAAATAAAATGTTGCGGAG
ATCTGATAGTCCTGAAAACAAATACAGTGACAGCACAGGTCACAGTAAGGCCAAAAATGTGCA
TACTCACAGAGTTAGAGAGAGGGATGGTGGGACCAGTTACTCTCCACAAGAAAATTCACACAA
CCACAGTGCTCTTCATAGTTCAAATTCACATTCTTCTAATCCAAGCAATAACCCAAGC

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FIGURE 401

TAACAACCACAGAACTGGANTAGTGGTCCTACAGTAGCTGCAGCTGATACCACTGAAACTAA
TTTCCCTGAAACTGCTAGCACCACAGCAAATACACNTTCTTTCCCAACAGNTACTTCACCTGC
TCCCCCATAATTAGACACATAGTTCCTCCACAATTCCTACACCTGCTCCCCCATAATTAGT
ACACATAGTTCCTCCACAATTCCTATACCTACTGCTGCAGACAGTGAGTCAACCACAAATGTA
AATTCATTAGCTACCTCTGACATAATCACCGCTTCATCTCCAAATGATGGATTAATCACAATG
GTTCTTCTGAAACACAAAGTAACAATGAAATGTCCCCCACCACAGAAGACAATCAATCATCA
GGGCCTCCCACTGGCACCGCTTTATTGGAGACCAGCACCCCTAAACAGCACAGGTCCCAGCAAT
CCTTGCCAAGATGATCCCTGTGCAGATAATTCGTTATGTGTTAAGCTGCATAATACAAGTTTT
TGCCTGTGTTTAGAAGGGTATTACTACAACCTC

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FIGURE 402

CCACAGTATGGAAGAATATCCCTGACTTCTAGCCCTGTGCGCCTTCTTTTGTTTCTGCTGTTG
CTACTAATAGCCTTGGAGATCATGGTTGGTGGTCACTCTCTTTGCTTCAACTTCACTATAAAA
TCATTGTCCAGACCTGGACAGCCCTGGTGTGAAGCGCAGGTCTTCTTGAATAAAAATCTTTTC
CTTCAGTACAACAGTGACAACAACATGGTCAAACCTCTGGGCCTCCTGGGGAAGAAGGTAAAT
GCCACCAGCACTTGGGGAGAATTGACCCAAACGCTGGGAGAAGTGGGGCGAGACCTCAGGATG
CTCCTTTGTGACATCAAACCCAGATAAAGACCAGTGATCCTTCCACTCTGCAAGTCGAGATG
TTTTGTCAACGTGAAGCAGAACGGTGCACTGGTGCATCCTGGCAGTTCGCCACCAATGGAGAG
AAATCCCTCCTCTTTGACGCAATGAACAT

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FIGURE 403

GTCGGGTGGTACGGCCGCTCCCTGCAGGNGAGTTCGTGNACGACGACGTGTGGGCGATCGTGA
ACAAACCCCGACGTGCGGGCCCGGCGCCCCGCTCCGTTGGGGCATCTTCACCAACGACTTNTG
GGGCAAGGGCATGGCCGAGAACACCAGCCACAAGTCCCTACCGCCGCTTTGCGTCCTCACCTTC
AAGCTAAACATATTTTTGACTGGTATGAACCCATTCTACTTTCATGCAGTAAATATAATTTTA
CACTGCTTAGTGACTCTTGCTGCTGATGTACACCTGTGATAAACTGTCTTCAAGAATCGTGGA
CTTGCTTTTGTAACGGCATTGCTTTTTGCTGTACATCCTATTCATACTGAGGCGGTGGCTGGG
ATCGTTGGCAGAGCGGACGTGTTAGCGTGTCTGCTGTTTCTATTGGCCTTCTCTCGTACAAC
AGGAGTCTGGATCAGGGCTGTGTTGGGGGAAGTTTCCCTTCCACGGTGTCTCCCTTCTTCTTG
CTGCT

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FIGURE 404

CTTGTTTGGTCGGTGGGAATATGTTGGGATTTATGTTTGCCTCTGAACAAGTGTCTTGCTCACA
TCGTAAATGACTTTCTCTCCGAAACGCTAAATATTCTTTCCCGCAGGAGCTCATATCCTTATT
TTCCATGACAGATCTTAACGGACAATATATGCAAAAGATATATAAAGATGATAACTAATATAG
TTTACTGAGCCTGATCATTTCGATTTTCGTTAGCTTTCTGGATTATATCAATGACTGCAAGCA
CCTATTATGGTAACTTACGACCTATTTCTCCGTGGCGTTGGCTGTTTTCTGTTGTTGTTCCCTG
TTCTGATCGTCTCTAATGGCCTTAAAAAGAAAAGTCTAGATCACAGTGGGGCTCTAGGAGGGC
TAGTCGTTGGATTTATCCTAAC

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FIGURE 405

AATGCCCCCAAGTTAAATACCTCCTCNACCTTTACNTAAGTTGCTCCTTTATTTTTATTTAT
TATTATTATTATTATTATTATTTTTTGAGATGGAGTCTCACTTTGTAACCCAGGNTGGAATGC
AATGGCATGATNTCAGCTCACTGCAACCTCCGCCTCNTGGGTTCAAGCAAGTNTCCTGCCTCA
GCCTCCGAGTAGCTGGGACTACAGGTGCACGCCACCACGCCTGGCTAATTTTTTGTATTTTAG
TAGAGACGGGGTTTCACCGTGTTGCCCAGGCTGGTCGCGAACTCCTGAGCTCAGGCAATCCGC
CCACCTCAGCCTCCCAAAGTGTTGGGATTACAGGCATGAGCCACCATGCCCAGCT

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FIGURE 406

GGGCTTGAAAATCTAAATACTTTGAAATTAGAATAATATCTTGTGTTTTAGAGCTTTAAATTT
TCAAATATNTGCTGTCCACACACCCCATTTGGAGGAGGACCTGTGTCTACTAACCCTAAATTTGTA
GCTGAGAAAACAGAGGCAGAGAGAGGTTAAGTAAAAAACCCCAAGAGAGTTCACCTAATATTG
TGAAGAAAGCAAACCCAGGGTTTCACTAACTTGTCCATGTGTGTATGTGTGTGGCTGCGTTCA
CCCCGTGTGTGTGTGTGTACTGTGTGCATGCCTGTGTGTTTGTGCACACCCATGTGTATGTACC
TGCATACACACCCAAGTGTGTGTGTTACCACAACGAAAGCGCAGATTTATTGAAAAGAAAGTG
CACTCCACAGAGTGGGAGCAGGCTAGAGCCAGTGGCTCAGGAGCCTGGTTACAGCATTTTCTG
GAGTTTAAGTGCCCTCCAGAGTTTTCCCATTTG

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FIGURE 407

CAGCCAGGCCAGAGAGGGAGCCGAGCCAGGCCATNTCCAACCATGTCCGANGAGGCCTCGGCC
ATCACTTCCTACGAGAAGTTTCTTAACCCCGAGNAGCCCTTCCCCTCCTGGGACCTTCCTC
GCGGGGGGGCACCTGCCCCGAGCAAGGAGCCGGGCTGCCTGGACATCAAGCGACTTCGGGTGCC
AGCTGTCCTCCTGCCATCGCACCGACCCGCTCCACCGCTTCCACACCAACAGGTGGAACCTAA
CTTCTTGTGGAACAAGTGTTGCCAGCTCAGAAGGCAGTGAGGAGCTGTTTTCATCTGTGTCTG
TTGGAGATCAAGATGATTGCTATTCCCTGTTAGATGATCAGGACTTCACTTCTTTTGATTTAT
TTCCTGAGGGGAGTGCTGCAGTGATGTCTTCTTCTATTAGCACTTACTGGGATTGGTCAG
ATAGCGAGTTTGAATGGCAGTTACCAGGCAGTGACATTGCCAGTGGGAGTGATGTACTTTCTG
ATGTCATACCCAGTATTCCAAGTTCACCTTGCCCTG

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FIGURE 408

TCAAAAAGGTTGCATTCNTTTTGCATAAACAGGGACTTTATATAGTTAACTCCCNTTATATAA
ATTCTCCTATAGTAATCTCAAAGAGTATTNTAGACTTCTCAATGCTTTTTATTGTTGCTGAAA
AGCAAAAAGACTTGCTGTGNAAGTGGAGAAGACTTCAACATCAAAGTGATTTTTTCTACTCTC
CTAGGAATGAAAGGAACACAAAGGGACCCGGAAGCATTTCCTGTCCAGATTGTGTCAAAATCT
CAATTGCCATCTGAGAATAGAGAAGGTAAAGTGCTGTGGACTGGCTGGTTCTGCTGTGTATTT
GGAGACAGTCTTCTGGAGACTGTTTCAGAAGATTTACCTGTCTGCCCTTATTCCTTGCAAAT
GGAGCAGAGTCTAACACAGCAATAATTGGAAGTTGGTTTCAGAAAACCTTTGACTGTTATTTT
AGTCCTTTAGCAATCAATGCATTTAATCTTTCCTGGATGGCTGCCATGTGGACTGCATGCAAA
ATGGACCATTATGTGGCTACTACTGAATTTCTTTGGTCTGT

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FIGURE 409

GACATTTATTTTTCATCCATTGCAACCCATTGCCATAAGAACATNCCCATGGCCTTGAAGCGC
TTCACAGCAGCATNGTGGAATGCAGAATTGGAGCCAAGCAATTTTCAAAGCAAGNTTNCTGAA
AATGAAAAAAAATACTTATATTGAAAACTTTTGGAGCGTTATGGTGAAAATGGAAGATTATC
CTTTTTTGGTTTGNAGAACTTTTAACAACTTGGGCCTTGGAGAGAGAAAAGTAGTTGAGAT
TAATCATGAGGATCTTGGCCACGATCATGTTTCTCATTTAGATATTTTGGCAGTTCAAGAGGG
AAAGCATTTTCACTCACATAACCACCAGCATTCCCATAATCATTTAAATTCAGAAAATCAAAC
TGTGACCAGTGTATCCACAAAAAGAAACCATAAATGTGATCCAGAGAAAGAGACAGTTGAAGT
GTCTGTAAAATCTGATGATAAACATATGCATGACCATAATCACCGCCTACGTCATCACCATCG
TTTGCATCATCATCTTGATCATAACAACACTCACCATTTTCATAATGATTCCATTACTCCCAG
TGAGCGTGGAGCGGCCGC

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FIGURE 410

TACCTATTCCCAGGTTTAATGTTGATTATTTATATTTGAAAAAANTTGATTTGTANAACTGG
GTANATTACTTTCAAATTAATCATTTATTCCTAATTGACCAGGGATGAGTGAGATGTTTATTT
AGAAAACAAATAATTTTAGATAGGAAAATTGAATCTTTAAAAAATAATGGTGATTTAATATAT
CAATGTGTGGTTTTTGTGTGTATGTGTGTAANATTGGAGCATCCAGGAGTGTGCGGTGTGTAT
ATGACCTTATTTTTCTACTGTATCTTAGAGGTTGCCNCTTCCATGGGTATAAACTTAATTGG
ATTTCTCGATTTTTATTTTGTATATGCACTTTTACAACCTTATGTCATTTTAGGTTGTTTATTA
ATGCCAGTTTTGTATAATAAAATTATTAGAGAAGTTATGAAGGAGGATGGCATGAGTGGGGCG
GCCGN

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FIGURE 411

ACGCAGAGCGTTTTTCATTTTCCACGGGTCTGTCCTTGTCAAAGCACACCCCTCGGTGTCCAGG
TTCNTCATGGGCAAGTGCTCGGGGTGACAAANAAGGCGACATTGACTACAGCACCGTGCTCCT
CGGCATGCTGGTGACGCAGGACGTGCAGCTCGGGCTTTTCATGGCTGTCATGCCGACTCTCAT
ACAGGCGGGCACCAGTGCATCTTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTTGAT
TGGTCAGATTCTTTTTTCACTAGCGGCGGTTTTTCTTTTATGTCTTGTTATAAAGAAGTATCT
CATTGGACCCTATTATCGGAAGCTGCACATGGAAAGCAAGGGGAACAAAGAAATCCTGATCTT
GGGAATATCTGCCTTTATCTTCTTAATGTTAACGGTCACGGAGCTGCTGGACGTCTCCATGGA
GCTGGGCTGTTTCCTGGCTGGAGCGCTCGTCTCCTCTCAGGGCCCCGTGGTCACCGAGGAGAT
CGCCACCTCCATCGAACCCCC

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FIGURE 412

CAGTTTTTTTATAGTGAATACCAAAANCATCAGCAANCACTGGACTGTCAACCCAAGGCTTAT
TGATATTTGCGGAGTTGATTTCTGCGATTAAAGAGACGTTGGCTCGCCTTCNTCGTGATCATTG
TGAGCCTGGGCTATGGCATTGTGAAGCCTCGTTTAGGAACAGTCATGCACCGGGTGATCGGAC
TGGGGCTTCTATACTTAATCTTTNCAGCTGTTGAAGGCGTGATGAGAGTCATTGGGGGTCTA
ACCATTTAGCTGTTGTTCTTGATGACATTATTTTAGCAGTTATTGACTCCATTTTTGTGTGGT
TCATTTTTATTAGTTTGGCACAAACTATGAAGACCCTAAGGCTAAGAAAGAACTGTGAAAT
TTTCATTATATAGACATTTTAAAAATACTCTGATCTTTGCTGTGCTGGCTTCTATAGTGTTA
TGGGGTGGGCGGCCGC

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FIGURE 413

ACGTGGTCTGCCTGTTATTGGAAAGATATATTAAGATCCAGTTCTGGATTNCANCTGTTTATT
TTTTTGGGAAATGCTTNAAAAGCAGTTTTTTTATAGTGAATACCAAACATCAGCAACACTG
GACTGTCAACCCAAGGCTTATTGATATTTGCGGAGTTGATTTCTGCGATTAAGAGGACGTTGG
CTCGCCTTCTCGTGATCATTTGTGAGCCTGGGCTATGGCATTGTGAAGCCTCGTTTAGGAACAG
TCATGCACCGGGTGATCGGACTGGGGCTTCTATACTTAATCTTTGCAGCTGTTGAAGGCGTGA
TGAGAGTCATTGGGGGTTCTAACCATTTAGCTGTTGTTCTTGATGACATTATTTTAGCAGTTA
TTGACTCCATTTTGTGTGGTTCATTTTTATTAGTTTGGCACAACTATGAAGACCCTAAGGC
TAAGAAAGAACACTGTGAAATTTTCATTATATAGACATTTTAAAAATACTCTGATCTTTGCTG
TGCTGGCTTCTATAGTGTTTATGGGGTGGGCGGCCGC

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FIGURE 414

ACCGGCCCGTGAGCCGGCCNTGCGCCGGCAGGTCGCGGGACATACTGTGGCGCGTTTTGGGCT
GGAGGATAGTTGCAAGTATTGTTTGGTCAGTGCTATTTCTACCCATCTGCACCACAGTATTTA
TAATTTTCAGCAGGATTGATTGTTTCATCCTATACAGTGGCTGTNTGATTCTTTCAGTGACC
TGTATAGTTCCTATGTAATCTTTTACTTCCTGCTGCTGTCAGTGGTAATAATAATAAAGTA
TTTTCAATGTGGAGTTCTATGCAGTTGTGCCTTCTATTCCCTGCTCCAGACTAGCTCTGATAG
GGAAGATCATTCATCCTCAGCAACTCATGCACTCATTTATTGCTGCAATGGGAATGGTGA
TGGCCTGGTGTGCTGCAGTGATAACCCAGGGCCAGTACAGCTTTCTTGTGGTTCCTGCACTG
GTACTAACAGCTTTGGTAGCCCTGCTGCGCAAACCTGCTTAAATGAATATCATCTTTTTTTCC
TACTGACTGGAGCGGCCGC

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FIGURE 415

GNCCACACTGGCCAAACGGGGCATCATGGNCACACTGCCNAAATAGGGCCGCCATGTTGCAGC
AGGATAGTAATGATGACCCTGAAGATGTTTCACTGTTTGATGCGGAAGAGGAGNCGACTAATA
GACCAAAAAAGCCAAAATCAGACATCCAGTAGCATCGTTTTTCCACTTTATTCTTTCGAGTCA
GTGCAATCATCGTCTATCTTCTCTGTGAGTTGCTCAGCAGCAGCTTTATTACCTGTATGGTGA
CAATTATCTTGTTGTTGTCGTGTGACTTTTGGGCAGTGAAGAATGTCACAGGTAGACTAATGG
TTGGCCTACGTTGGTGGAATCACATTGATGAAGATGGAAAGAGCCATTGGGTGTTTGAATCTA
GAAAGGAGTCCTCTCAAGAGAATAAACTGTGTCAGAGGCTGAATCAAGAATCTTTGGTTGG
GACTTATTGCCTGTCCAGTACTGTGGGTGATATTTGCTTTTAGTGCACTCTTCTCCTTCAGAG
TAAAGTGGTTGGCGGTGTTATCATGGGTGTGGCGGCCGC

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FIGURE 416

CAGCAGTCCTTATGATTATGGAGGAAAGTGGAGGNCCCTTATAGCNAAACAGGTATGCTGGNT
ATGACNTATTCGCAGCAAAGGCAGATTTGTCCCCTCCAGACATGATGCAGCCACAACAGCCAT
ACACCGGGCAGATTTNCCAGCCAACCTCAGGCATATACTCCAGCTTCACCTCAGCCTTTNTATG
GAAACAACCTTTGAGGATGAGCCACCTTTATTAGAAGAGTTAGGTATCCAATTTTGACCACATN
TGGCAAAAACACTAACAGTATTACATCCGTTAAAAGTAGCAGATGGCAGCATCATGAATGAA
ACTGATTTGGCAGGTCCAATGGTTTTTTGCCTTGCTTTTGGAGCCACATTGCTACTGGCTGGC
AAAATCCAGTTTGGCTATGTATACGGGATCAGTGCAATTGGATGTCTAGGAATGTTTTGTTTA
TTAAACTTAATGAGTATGACAGGTGCGGCCGC

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FIGURE 417

TAATTGTTTATTGGGAAATGGAGGATTAAGNACATTTTTCAATTTGTGCATGNAGAGGAAGAC
CTGAAGGTTTCAGCATANTAGCTACAAGACAGANGGGCCCGGCTGTTNAAGGACCAGCTCTCCC
TGGNAAATGTGCACTTTCAGATCACAAGATGTGAAATTGCAGGATGCAGGGGTGTACCGCTGC
ATGATCAAGCTATGGTGGTGCCGACTACAAGCGAATTNCTGTGAAAGTCAATGCCCCATACAA
CAAAATCAACCAAAGAATTTTGGTTGTGGATCCAGTCACCTCTGAACATGAACTGACATGTCA
GGCTGAGGGTTACCCCAAGGCCGAAGTCATCTGGACAAGCAGTGACCATCAAGTCCTGAGTGG
TAAGACCACCACCACCAATTCCAAGGGAGAGGCGGCCGC

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FIGURE 418

AGGTGCTTGTGCTCGAACCCAGTGGTTGGGGCGGTGCTCCTCAAGCTTGTGTGCCTGCTAACC
NTCNTGNGTCCGGGNTGGCAAGAGTGTGGGACTTTCCCCCTGGCGNCCGTGGACAACATGATG
GTCAGAAAAGGGGACACGGCGGGTGNTTAGGTGTTATTTGAAAGATGGAGCTTCAAAGGGTGC
CTGGCTGAACCGGTCAAGTATTATTTTTGCGGGAGGTGATAAGTGGTCAGTGGATCCTCGAGT
TTCAATTTCAACATTGAATAAAAGGGACTACAGCCTCCAGATACAGAATGTAGATGTGACAGA
TGATGGCCCATACACGTGTTCTGTTTCAGACTCAACATACACCCAGAACAATGCAGGTGCATCT
AACTGTGCAAGTTCCTCCTAAGATATATGACATCTCAAATGATATGACCGTCAATGAAGGAAC
CAACGTCACTCTTACTTGTTTGGCCACTGGGAAACCAGAGCCTTCATTTCTTGCGGACACAT
CTCCCCATCAGCAAACCATTTGAAAATGGACAATATTTGGACATTTATGGAATTACAAGGGA
CCAGGCTGGGGCGGCCGC

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FIGURE 419

TAAACTACACTCAGTATACAGTGATAGTGGGATTTGAACACCTGAAGCTCCCCATCAAAGGGA
ATGAACTTCACATGAAGACTTATAACCCTGCCTTCTCCCGGGTTGGAAATCTGGTTCGGGTTT
TTCTTTGTGGTGCTCACCTTCATCGTCACTTGCCTGTTTGCGCATTCCTCCGGAAATTTTCC
ATGAGAGACTGGGGCATCGAGCAGAAGTGGATGTCTGTTCTCCTGCCTCTGCTGCTACTTTAC
AATGATCCGTTCTTCCCCCTCTCCTTCCTGGTCAACAGCTGGCTCCCAGGGATGCTGGATGAC
CTCTTTCAGTCCATGTTCTGTGCGCCCTGCTGCTCTTCTGGCTGTGCGTGTACCACGGGATT
CGTGTCCAGGGAGAAAGAAAGTGTTTAACTTTCTATTTGCCTAAATTCTTCATTGTTGGACTA
TTGTGGTTGGCTTCTGTTACGCTAGGAATATGGCAAACAGTTAACGAATTACATGATCCAATG
TACCAGTATCGAGTTGATACCGGAAATTTTCAGGGAATGAAGGTCTTCTTCATGGTGGGGGCA
GCGGCCGC

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FIGURE 420

GTGTCTGCTCGCCCTCCGACGCTGCTCAGGAATTTGCAAGAACTGAAGTTTTGATTCAGATA
TATTTTGAATTGAAACCAGAGATGTTNTAGAGTTTAGATTCTTTCATTTGATTAAGGTATGGT
CTGAATATGCGTTGCTTGGCAGCTCGGGTCAACTATAAGACTTTGATTATTATCTGCGCACTC
TTCACTTTGGTCACAGTACTTTTGTGGAATAAGTGTTCCAGTGACAAAGCAATCCAGTTTCCA
CGGCGTTTCGAGTAGTGGCTTCAGAGTGGATGGGTTTGAAAAAAGAGCAGCAGCATCTGAGAGT
AACAACTATATGAACCACGTGGCCAAACAACAGTCTGAGGAAGCATTCCCTCAGGAACAGCAG
AAAGCACCCCCTGTTGTTGGGGGCTTCAATAGCAATGTGGGAAGTAAGGTGTTAGGGCTCAA
TATGAAGAAATTGACTGTCTCATAAATGATGAACACACAATTAAAGGGAGACGAGAGGGGAAC
GAAGTCTTTCTTCCATTCACTTGGGTTGAGAAATATTTTGATGTTTATGGAAAGGTGGTGGCG
GCCGC

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FIGURE 421

AGGCTCCCGTGTCTGCTCGCCCTCCGACGCTGCTCAGGAATTTGACAAGAACTGAAGTTTTG
ATTCAGATATATTTTGAATTGAAACCAGAGATGTTCTAGAGTTTAGATTCTTTCATTTGATTA
AGGTATGGTCTGAATATGCGTTGCTTGGCAGCTCGGGTCAACTATAAGGCTTTGATTATTATC
TGCGCACTCTTCACTTTGGTCACAGTACTTTTGTGGAATAAGTGTTCAGTGACAAAGCAATC
CAGTTTCCACGGCGTTCGAGTAGTGGCTTCAGAGTGGATGGGTTTGAAAAAGAGCAGCAGCA
TCTGAGAGTAACAACCTATATGAACCACGTGGCCAAACAACAGTCTGAGGAAGCATTCCCTCAG
GAACAGCAGAAAGCACCCCTGTTGTTGGGGGCTTCAATAGCAATGTGGGAAGTAAGGTGTTA
GGGCTCAAATATGAAGAAATTGACTGTCTCATAAATGATGAACACACAATTAAAGGGAGACGA
GAGGGGAACGAAGTCTTCTTCCATTCACTTGGGTTGAGAAATATTTTGATGTTTATGGAAAG
GTGGGGGCGGCCGC

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FIGURE 422

TTCTTTTTTTTCCCCNGCAATTTTTTCAGTGAAANACATGGAGTCTTTCATCTTGGAGAGTT
GTCAGAGTCAAGATTTTGCTGTTGTAGCCAGTGCTTTAAAACAATTCACAAAGACTTTCTAGG
AGAGGAAGAGAGNCTGAGGGAAGAAGAGATACAGAAAAAGAAAATGNCAGGATTGAACCTGGA
AACTCACAGAATCTCTGACTCATGCTGGAAATGTNTTTGGGTACCTCTTGCCTTTTNTGTGTT
GGCGGCGGCCGC

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FIGURE 423

TGAAAGGACCCCTAGTTCCCCTGGCAAATGNTTTTNTTCAATCCCCACTTCATTTTCCTTAA
GAGCCATTCCAAGTNTCTTCCTTTNTCGATACCCCAACCAGCTCACATCCCCTCAAGGGGTG
AGATGCCCTCCTCACCATTGAAGAGATCAAGCCCCAGGGGGGAACCAGCTCAACTTCCCCCT
CTGTCTCTCCGAAGAGCNTCCTGTTTGAAAACCTCGAGGCAGCTGTACCCCGTGCGAAGTTCTT
GCTCCCGTCTCCCCATGTCTTCCAGGATTTTCCTTCATAGTGGGGATTACTCGCTAACCTTTC
CTTCCTCACCTACTTCCCCTTTTCCTTCAGCTTTCACCGTGTTTAAATCTTCTAATAATTCTT
TTTATGACATCTTGTTTTTCAAGCTCTTCTCCAGTGATCCCTCCACTTCTCCAATGGCCCTTT
TCACTAAACCTCCAAATTTGTCTTTGCTGACATTTATTGAGCTGCTATTACATGTTCTAAATG
CTTTACTTGTCGTATTTAATCCTAACAACAACCTACAAGGTAGGCCTTGCTATTATCTCCATT
TTATAGTTGAAGAACTGAGGCTGCCGCGGCCGC

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FIGURE 424

TATCGGCACATTGGCAAAGACAACATTCAGGCCCCAATGGCCCACAAATTGGTCCGCCCAATGC
CATNTGNAAAAGGNTTCACTGCAAATTACAAAAGCATCCNTNATGAAAAGAGATTGGAAAGG
CCTCTCCAAGCAACTGGACTGGGATGTTCTGAAGCATTAGCGCTGGTTCGCAAAGACGCAATC
AGGANAAGCCCAAGCACGGCTGACGAGGTTCTGTGAGAGCATGTGGANATTTTCATTTTACCT
TTATGTATTTACCTACGGAGTCAGATTCCTGAAAAAGACCCCCTGGTTGTGGAATANGAGGCA
TTGNTGGTACAACCTACCCCTATCAGCCACTCACAACTGACCTTCACTACTATTACATCCTGGA
GCTGTCGTTTTATTGGTCTTTGATGTTTTCTCAGTTCNCTGATATCAAAGAAAGGACTTTGG
CATTATGTTCTGCACTACCNTGTATCTATTTTCTTGATTACCTTTTCATATGTCAACAATAT
GGCCCGAGTAGGAACGCTGGTCCTTTGTCTTCATGATTCAGCTGATGCTCTTCTGGAGGCTGC
GGCCGC

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FIGURE 425

ATTTTTTGAAATTAATGCNTGAGCTTTATTTTGTTTAATTGTTATGCCCACTGGATTGGGACA
AGCATCACCTCTGAATTTTGAAGACCTTAATGTGTGTTAGCCATTGNAAAGCTACTCAAGTGC
TGTGCAAGAGTCATACCCACATCCCTTTGATCAAATTTACTACACGAGCTGCACTGACATTCT
AAACTGGTTTAAATGCACGCGGCACAGAGTCAGCTATCGGACAGCCTATCGACATGGGGAGAA
GACTATGACAGGCGCAAGTCTCAGTGTTGTCCTGGATTTTATGAAAGCGGGGAAATGTGTGTC
CCCCACTGTGCTGATAAATGTGTCCATGGTCGCTGTATTGCTCCAAACACCTGTCAGTGTGAG
CCTGGCTGGGGAGGGACCAACTGCTCCAGTGCCTGCGATGGTGATCACTGGGGTCCCCACTGC
ACCAGCCGGTGCCAGTGCAAAAATGGGGCTCTGTGCAACCCCATCACCGGGGCTTGCCACTGT
GCTGCGGGCTTCCGGGGCTGGCGCTGCGAGGACCGCTGTGAGCAGGGCACCTATGGTAACGAC
TGTCATCAGAGATGCCAATGCCAGAATGGAGCCACCTGCGACCACATCACGGGGCTGGCGGCCGC

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FIGURE 426

TTTTC AATGAAAAAAGAATCCCAAAAAAAAAAAGTTGTCAGCCTCATTGTGCGTCATCCCTT
ATTTTCCTGGGATCTCAGGACCTCTGTCCCTCTCATTCTCACTTCTGAGATCTGCACATCTT
TTACCCAGGAGCCTCAGAGCTCCTGAGTCTGGTGTCTGCCTATCCCATCTTCACTGTTAGTC
CTCCTGCAGATTCTGTGTCTCCTTTCATGTAGGTGCTGGATCCCTGTGTGTGGAGCGGCCGC

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FIGURE 427

ACAAAGTTTCCCAATGACTTGTTAAAAGTCGATGGTGTAGCTCAAGATGGAACCCNCAATGTA
CATTAATAACAAAAGTTCACAACGGGCAAAGGACCNTCACATGTGCAAGGAAAATGTGCGGAG
ATTATTGGGCTCACCTTGGGTACNTGAACTACACTCAGTATACAGTGATAGTGGGATTTGAAC
ACCTGAAGCTCCCCATCAAGGGAATGAACTTCACATGGAAGACTTATAACCCTGCCTTCTCCC
GGTTGGAAATCTGGTTCCGGTTTTTCTTTGTGGTGCTCACCTTCATCGTCACTTGCCTGTTTG
CGCATTCCTCCGGAAATTTTCCATGAGAGACTGGGGCATCGAGCAGAAGTGGATGTCTGTTC
TCCTGCCTCTGCTGCTACTTTACAATGATCCGTTCTTCCCCCTCTCCTTCCTGGTCAACAGCT
GGCTCCCAGGGATGCTGGATGACCTCTTTCAGTCCATGTTCTGTGCGCCCTGCTGCTCTTCT
GGCTGTGCGTGTACCACGGGATTCGTGTCCAGGGAGAAAGAAAGTGTTTAACTTTCTATTTGC
CTAAATTCTTCATTGTTGGACTATTGTGGTTGGCGGCCGC

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FIGURE 428

GCATCCGCTTGACTGCATNTGAGTTTTCCCAGTCTGTCTTTGGGGATGGGGCCATGCCATAGT
CTTGATGTCTTGTGCCGTGTGATTTTTGCAGATAAGATGACTTGGCCCATGGCCCNAGATCA
CTTATTCTGGGGAAGTGTAGGAACAGTGGTTGCCTAACCCAAGTTCTTACATGATGTACCTTT
TTCCTTCTAAAAAATAACTTAAAAATATGAAATATACTAATTTGTTTCAGATATTACATACA
ATTGGAAAGTGGACAAGTTCCTGTATATGCTGTCACTTTTCAAGAACCTGAGAATGATCCTCG
GAATTGCTGTTACTTGTGGGCTGTTCACTCTACACAAGATAGGTAGGTCTCATACAAACTTTG
TTTTGTTTTGTTTTGTTTTTTTTGGAGACAGAGTCTCGCTCTGTTGTCCAGGCTGGAGTGCAGT
GGCGTGATTTGGGCTCACTGCAACCTCCGCCTCCCGGATTCATGCCATTCTCTCGCTCAGCCT
CCCGAGTAGCTGGGACTACAGGTGCCTGCCACCATGCCTGGCTAATTTTTATATTTTCAGTAG
AGACGGGAGCGGCCGC

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FIGURE 429

TTAATTTAAAAATATGAAAAGTAAAAATGGGATTTTGTCTTATTTGTGTTNNANAGCTGGCTT
TTCACACATGCAGTTGTTAGTGTTTACTGCCCTTGCCATTTTAATTATGAGGCTAAAGATGTT
TTTGACACCGCACATGTGTGTTATGGCTTCCTTGATATGCTCTCGACAGCTCTTTGGCTGGCT
TTTTTCGCAGAGTTCGTTTTGAGAAGGTTATCTTTGGCATTTTAACAGTGATGTCAATACAAGG
TTATGCAAACCTCCGTAATCAATGGAGCATAATAGGAGAATTTAATAATTTGCCTCAGGAAGA
ACTTTTACAGTGGATCAAATACAGTACCACATCAGATGCTGTCTTTGCAGGTGCCATGCCTAC
AATGGCAAGCATCAAGCTGTCTACACTTCATCCCATTGTGAATCATCCACATTACGAAGATGC
AGACTTGAGGGCTGCGGCCGC

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FIGURE 430

GGCCCNCACTGGCCAAAATAGTTGGAATGCCTTTTNTTATTACCAATGGGGCCCAAGGGGAA
NAGTGGGTGTTTGGGGGGCCTTTTGCACCATCATCACATCCCTGGATACTTGTAACCAATTT
GCCTGTAGTGCCATCATGACTGTAATGAGTGTGGACAGGTACTTTGCCCTCGTCCAACCATT
CGACTGACACGTGGAGAACAAGGACAAGACCATCCGGATCAATTTGGGCCTTTGGGCAGCTTC
CTTTATCCTGGCATTGCCTGTCTGGGTCTACTCGAAGGTCATCAAATTTAAAGACGGTGTTGA
GAGTTGTGCTTTTGATTTGACATCCCCTGACGATGTACTCTGGTATACACTTTATTTGACGAT
AACAACTTTTTTTTTCCCTCTACCCTTGATTTTGGTGTGCTATATTTAATTTTATGCTATAC
TTGGGAGATGTATCAACAGAATAAGGATGCCAGATGCTGCAATCCCAGTGTACCAAACAGAG
AGTGATGAAGTTGACAAAGATGGTGCTGGTGCTGGCGGCCGC

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FIGURE 431

AGGTGTCACCATGGCAAAGCTTCCCTTCTTGATTCTCTCGAGTTTGTTGAAGCGTNTACGGTT
NCACTGACGGATTTCAGAAGCTCATTTTACCTCAGCTTTCATTGAAACTACCTCCTATCTTGAG
TCTTCACTCATTTCCCATGAATCCGCAGTCACTGCACTGGTGCCCCCGGTCTGAGTCTTTTG
ACATTTTGA CTGCCGGGATTCAAGCAACATCACCATTGACCACTGTCCACACAACGCCCATTT
TAACTGAGTCTTCTTTGTTCTCAACTCTGACACCTCCTGACGACCAAATCAGTGCTCTAGACG
GTCACGTGTCTGTCCTGGCCTCTTTCTCAAAGCCATTCCCACTGAGCTGACCGTCGTGGGCC
CATCACTCACACCCACAGAGGTGCCACTGAACACCTCCACGGAAGTGAGCACAACCAGCACCG
GTGCTGCCACTGGTGGTCCCCTCGACTCCACCCTGATGGGTGACGCCGCAAGTCAGAGCCCCC
CAGAGAGTAGTGCTGCTCCTCC

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FIGURE 432

ACACTCAGAACAGGAGNAATTTGGACTAATTTTCAAACCTACAGACACTTTCTAATCATGATGC
ATTTCAAAAAGTGGACTCGGAATTTAACTGNGTTGCAAAACATGNCAGTGCCCGAGGATGATAA
CATTAGCAATGACTCCAATGATTTACCGAAGTAGAAAATGGTCAGATAAATAGCAAGTTTAT
TTCTGATCGTGAAAGTAGAAGAAGTCTCACAAACAGCCATTTGGAAAAAAGAAGTGTGATGA
GTATATTCCAGGTACAACCTCCTTAGGCATGTCTGTTTTTAACCTAAGCAACGCCATTATGGG
CAGTGGGATTTTGGGACTCGCCTTTGCCCTGGCAAACACTGGAATCCTACTTTTTCTGGTACT
TTTGACTTCAGTGACATTGCTGTCTATATATTCAATAAACCTCCTATTGATCTGTTCAAAAGA
AACAGGCTGCATGGTGTATGAAAAGCTGGGGGAACAAGTCTTTGGCACCACAGGGAAGTTCGT
AATCTTTGGAGCCACCTCTCT

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FIGURE 433

CCAACCCAATTACCAAGCAGATNCTTTTGGGGGATTCCAGCCATCAGACAAGGAACCCATGGC
AGCTGCAGGGTTTTTGCATTGTGCAAGCTTATGCTTCTTGCAGATNTGAGAGCCGATTAAC
AAANCAAGAGTTCCAGACCNTTTTCTTTTGGGTGTATCACTAGCTGCAGGTGCTGTGTTCCCT
TAGTGTCTATCTATTTGACTTATACAGGTTACATTGCACCATGGAGTGGCAGGTTTTATTCATT
GTGGGATACTGGGTATGCAAAAATACACATTCCAATTATTGCATCAGTGTCTGAGCATCAACC
TACGACTTGGGTGTCTTTCTTCTTTGATCTACATATTCTTGTATGTACCTTCCCAGCAGGCCT
TTGGTTCTGCATCAAAAATATCAACGATGAAAGAGTATTTGTTGCTCTATATGCAATCAGTGC
TGTCTACTTTGCTGGAGTGATGGTGCGACTGATGTTGACTTTGACTCCAGTCGTGTGTATGCT
GTCTGCAATTGCCTTTTCAAATGTTTTTGAGCACTATTTGGGGGCTGCGGCCGC

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FIGURE 434

ATTGCAGCTGTTATTTTTTTGGAAATGCTTGAAAAAGCAGTTTTTTTATAGTGAATACCAAAAC
ATCAGCAACANTGGACTGTCAACCCAAGGCTTATTGATATTTGCGGAGTTGATTTCTGCGATT
AAGAGGACGTTGGCTCGCCTTCTCGTGATCATTGTGAGCCTGGGCTATGGCATTGTGAAGCCT
CGTTTAGGAACAGTCATGCCCGGGTGATCGGACTGGGGCTTCTATACTTAATCTTTGCAGCTG
TTGAAGGCGTGATGAGAGTCATTGGGGGTTCTAACCATTTAGCTGTTGTTCTTGATGACATTA
TTTTAGCAGTTATTGACTCCATTTTTGTGTGGTTCATTTTTATTAGTTTGGCACAAACTATGA
AGACCCTAAGGCTAAGAAAGAACTGTGAAATTTTCATTATATAGACATTTTAAAAATACTC
TGATCTTTGCTGTGCTGGCTTCTATAGTGTTTATGGGGCGAGCGGCCGC

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FIGURE 435

GGCCACACTGGCCAACTAAAATTTTTGGTATTGCAGATGACGCTCATATTGGCAACTTACTA
ACATCAAAATTCTTTAGTTATAAGGATTTTGATACTTTATTGTATACCTGTGCAGCGGAGTTT
GACTTTATGGAAAAGAGACTCCACTGAGATACACAAAGACATTATTGCTTCCAGTTGTTCTT
GTAGTGTTTGTGCTATTGTTAGAAAGATTATTAGTGATATGTGGGGTGTCTTAGCTAAACAA
CAGACACATGTAAGAAAACACCAGTTTGATCATGGAGAGCTGGTTTACCATGCATTGCAATTG
TTAGCATATACAGCCCTTGGTATTTTAATTATGAGACTAAAACCTCTTCTTGACACCACACATG
TGTGTTATGGCATCACTGATCTGCTCAAGACAGCTATTTGGATGGCTCTTTTGCAAAGTACAT
CCTGGTGCTATTGTGTTTGCTATATTAGCAGCAATGTCAATACAAGGTTTCAGCAAATCTGCAA
ACCCAGTGGAATATTGTAGGGGAGGCGGCCGC

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FIGURE 436

AGGGTTTTAATAGGACTANCAGTACGATGGGCAGTGTCTNTTAATTTTTATTTCAGGNGCTGGT
AANCCGCCTATGTTTGGTGATTATGAAGCTCAGAGACCTGGCAAGAAATAACTTTTTAATTTA
CCGGTCAAACAATGGTATTTTACCAGCAGTGATAACAATTTACAGTATTGGGGATTGGATTAC
CCACCTCTTACAGCTTATCATAGTCTCCTATGTGCATATGTGGCAAAGTTTATAAATCCAGAC
TGGATTGCTCTCCATACATCACGGTGGATATGAGAGTCAGGCACATAAGCTCTTCATGCGTAC
AACAGTTTTAATTGCTGATCTGCTGATTTACATACCTGCAGTGGTTTTGTACTGTTGTTGCTT
AAAAGAAATCTCAACTAAGAAAAAGATTGCTAATGCATTATGCATCTTACTGTATCCAGGCCT
TATTCTTATAGACTATGGACATTTTCAATATAATTCTGTGAGTCTTGGCTTTGCTTTGTGGGG
TGCGGCCGC

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FIGURE 437

CACTGGCCAAAAAATTCGATGCGAGGCCCCAGNAAGCACGCTGAAACCNTGGCGGCGGCAAGCT
GTGCGACTNTTTTGCGGCCGGCCTGGGCAGGTGTCTTCCTCGAGAGGCAGGCAGGGGATCCCG
GACACTAGCTTTATCGTCATCTGGGAAATTGTTAAAAATGCAAATTCGCAAGTTTGAGAGCCA
TGGTTCCAAGAACTGCATAAGCATACGAAATAAGTTGCAGCCTCCCGACTTATACCCCTGGTA
CTTCTAGTCTAAAACAGGATTTGACTCTACTAATCCAGCCTTATACAGGATGCTGTGTTCTTT
GCTCCTTTGTGAATGTCTGTTGCTGGTAGCTGGTTATGCTCATGATGATGACTGGATTGACCC
CACAGACATGCTTAACTATGATGCTGCTTCAGGAACAATGAGAAAATCTCAGGCAAAATATGG
TATTTCAAGGGGAAAAGGATGTCAGTCCTGACTTGTCATGTGCTGATGAAATATCAGAATGTTA
TCACAACTTGATTCTTTAACTTATAAGATTGATGAGTGTGAAAAGAAAAAGAGGGGTGCGGC
CGC

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FIGURE 438

AGAAAAAGAAGAATCAACGTAAATAAGATAAANGGATTCAAAATAAAGATNTCTTGAAGAGAA
ATAAGAATCATTTACAAAAGCAGCAGAGAAAAATTTTACAGATGAAGGAGCCAGCTATTTAAG
ATGGGCATCAAGGTTCTCCAGCAGTCTAAAAGCCAAAAACAAAAGAAGAAGCCTACCTACTT
TTTGCCAAAGCAGCTGACATGGGAAACTTGAAAGCTATGGAGAAAATGGCTGACGCTTTGCTA
TTTGGAATTTTGGCGTGCAAAATATAACAGCAGCTATCCAATTATATGAGTCCTTGGCTAAA
GAAGGATCATGTAAAGCCCAAAACGCATTAGGATTTTGTCTTCTTATGGAATAGGAATGGAA
TATGATCAAGCTAAGGCACTGATATATTACACCTTTGGAAGTGCTGGAGGAAACATGATGTCC
CAGATGATTTTGGGGTACAGATATTTGTCGGGAATCAATGTTCTACAGAATTGTGAAGTTGCC
CTAAGTTATTACAAGAAAGTGGCAGATTATATTGCTGACACATTTGAAAAAAG

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FIGURE 439

TTTTGTTGCCTTGGGTGTTCTCACACTCTGCAAGTTTTACTTGCAGGGTTATCGAGTTTTTCAT
GAATGATCCTGCCATGAATCGGGGCATGACAGAAGGAGTAACGCTGTTAATCNNTGGCAGTGC
AGACTGGGNTGATAGAACATGCAGGTTGTTTCATCGGGCATTCTTGCTCAGTATTATCCTTTTC
ATTGTCNGTAGCTTCTATCCTACAGTCTATGTTAGAAATTGCAGATCCTATTGTTTTGGCACT
GGGAGCATNTAGAGACAAGAGCTTGTGGAAACACTTCCGTGCTGTAAGCCTTTGTTTATTTTT
ATTGGTATTCCCTGC

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FIGURE 440

ACCACCTTGCCCATTTATTTTGGCCCTTGTTAAACCAATAACTGCNTATCCAGATATGCCACA
NTTTTGCCTGCTGTGGCANCCNTCNTGGATAGGTGCTCTTGTTAATCACATGGATGTTATATA
AGAGTTGGGCCGGCCCAGCACACAAGGTCAGCATGTGCTCTTNTGTCACGCTCTCGCTATAGC
TGTTGTCCAGATCGTTATCTTCTCAGAAAGCTGGGCATTTGCCAAGAACATCAACTTCTATAA
TGTGAGGCCTCCTCTCGACCCTACACCATTTCCAAATAGCTTCAAGTGCTTTACTTGTGAAAA
CGCAGGGGATAATTATAACTGCAATCGATGGGCAGAAGACAAATGGTGTCCACAAAATACACA
GTACTGTTTGACAGTTCATCACTTCACCAGCCACGGAAGAAGCACATCCATCACCAAAAAGTG
TGCCTCCAGAAGTGAATGTCATTTTGTGCGTTGCCACCACAGCCGAGATTCTGAACATACGGA
GTGTAGGTCTTGCTGTGAAGGAATGATCTGCAATGTAGAATTACC

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FIGURE 441

ATTTATTTTGCTAAATTGAAAGGGAACATAGATGGAATTCCAAAATATGTACATTCAGCTGTT
TGGTTTTTCGTTTTTCATTGTTATTATTGTGAGAATGCTGTTATTGGGGTTGTGTGTGAGTGC
CCGTCAGCCAGTGATGCCTCGGGCCACGCTGTGGGGCCACCTCAGTCCTGCCTGGGTCCTGGT
GCCTTGGACCCACGTGCTTGTGGCCAGGCTGCCCCTGGGCGGGGCCATGTGGCCTCAGACCA
CAAGAGCGGAGCTGCCCTGGCCCAAGCACTGCAGCTGCCTGCACCCCCGGG

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FIGURE 442

CGACCGCCCTTCGCGGGGCAGNAAGGCCAGGGGTGCTNAGTTCTTTCACCTCCTTTTAGACTN
AAGATTTGCCAAGTTTTCCGGCATTGNTCTTGAGGATCTCAGAAGGGCTCTTTAAGCAAGACT
GCAAATGGGTGNGTATTTGTCATGAACCGAATGAATTCCCCAGAACAGTGGTTTCACTCAGCG
CAGGGGAATGGCTCTTTGGGATTGTTATTCTTCTGCTTGTTGATGTGATATGGGTTGCTTCCT
CTGAACTTACTTCGTATGTTTTTACCCAGTACAACAAACCATTCTTCAGCACCTTTGCAAAAA
CATCTATGTTTGTGTTTGTACCTTTTGGGCTTTATTATTTGGAAGCCATGGAGACAACAGTGTA
CAAGAGGACTTCGCGGAAAGCATGCTGCTTTTTTTGCAGATGCTGAAGGTTACTTTGCTGCTT
GCACAACAGATACAACATGAATAGTTCTTTGAGTGAACCTCTGTATGTGCCTGTGAAATTCC
ATGATCTTCCAAGTGAAAAACCTGAGAGCACAAACATTGATACTGAAAAAACCC

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FIGURE 443

GACCTCGACCCAAGGGTCCGCGGANGGGTGGGACTGGTCATGGATCTTTNGTCAAGAATGAGT
TTCGGCCCCCTCCTACCTTATGGGCTATAATAAATCCTTGAGTGTGGGGCAACCACAACCTTTT
CTGACTGGGATTATTCAGCTAATAATGGGCGTATTGGGTTTGGGTTCATTGCCACTTACCTTC
CGGAGTCTGCAATGAGTGCTTACCTGGCTGCTGTGGCACTTCATATCATGCTGTCCCAGCTGA
CTTTCATCTTTGGGATTATGATTAGTTTCCATGCCGGTCCCATCTCCTTCTTCTATGACATAA
TTAATTACTGTGTAGCTCTCCCAAAGCGAATTCCACCAGCATTCTAGTATTTCTAACTGTTG
TTGTTGCTCTGCGAATCAACAAATGTATCAGAATTTCTTCAATCAGTATCCCATTGAGTTTC
CCATGGAATTATTTCTGATTATTGGCTTCACTGTGATTGCAAACAAGATAAGCATGGCCACAG
AAACCAGCCAGACGCTTATTGACATGATTCCTTATAGCTTTCTGCTTCCTGTAAC

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FIGURE 444

ACAGTTGTGGGGAATCACTGTTCTGGTTAGAAATTTCTGCATTTTATATTATTTTCTTGGCT
ATATTCCCAAAGCTTGGATTAGCACTGCTATGAACCTTCACATAGATGAGCAGGTTTCATAGGC
CACTTGACACAGTGAGTGGCCTCTTAAATCTCTCGTTACTCTACCATGTCTGGCTGTGTGGTG
TCTTTCTCCTGACGACTTGGTATGTCTCATGGATACTCTTCAAATCTATGCCACAGAGGCTC
ATGTGTTTCCTGTTCAACCACCATTTGCAGAAGGGTCAGATGAGTGCCTTCCAAAAGTGTTAA
ATAGCAATCCTCCCCCATCATAAAGTATTTAGCCTTGCAGGACCTGATGTTGCTTTCTCAAT
ATTCTCCTTCACGAAGACAAGAAGTTTTAGCCTCAGCCAACCAGGTGGACATCCCCACAATT
GGACAGCCATTTCAAGGGAGTGTTTGAATCTTTTAAATGGTATGACTCAGAACTGATTCTCT
ATCAAGAAGCTGCTGCTACGAATGGGGGGCATCATGCGGCCGC

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FIGURE 445

TTCATGGTAAAAAATGAACTACCCTCTGCCATAAAGTTTNTAATGGGAAAGGAAGAGACATTT
TCAGCNTGGACGTGGATGGCCGCGTTCTGGTGGTGATAGTTACCTTTGGCATAATTCTCCCTC
TGTGTCTCTTGAAGAACTTAGGGATCTTGGCTATACTAGTGGATTTTCCNTGAGCTGTATGGT
TTTTTTCCTAATTGTGGTTATTTACAAGAAATTTCAAATCCCTGCATTGTTCCAGAGCTAAA
TTCAACAATAAGTGCTAATTCAACAAATGCTGACACGTGTACGCCAAAATATGTTACCTTCAA
TTCAAAGACCGTGTATGCTTTACCCACCATTCGATTTGCATTTGTTTGCCACCCGTCAGTCCT
GCCAATTTACAGTGAGCTTAAAGACCGATCACAGAAAAAATGCAGATGGTTTCAAACATCTC
CTTTTTCGCCATGTTTGTTATGTACTTCTTGACTGCCATTTTGGCTACTTGACATTCTATGA
CAACGTGCAGTCCGCGGCCGC

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FIGURE 446

GNCCACACTGGCCAAAAGGTTGCCGCTAGCCGCCTGGGAATTTAAGGGACCCACACTACCTTC
CCGAAGTTGAAGGCAAGCGGTGATTGTTTGTAGACGGCGCTTTGTCATGGGACCTGTGCGGTT
GGGAATATTGCTTTTCCTTTTTTTGGCCGTGCACGAGGCTTGGGCTGGGATGTTGAAGGAGGA
GGACGATGACACAGAACGCTTGCCCAGCAAATGCGAAGTGTGTAAGCTGCTGAGCACAGAGCT
ACAGGCGGAAGTGAAGTGCACCGGTCGATCTCGANAGGTGCTGGAGCTGGGGCAGGTGCTGGA
TACAGGCAAGAGGAAGAGACACGTGCCTTACAGCGTTTCAGAGACAAGGCTGGAAGAGGCCTT
AGAGAATTTATGTGAGCGGATCCTGGACTATAGTGTTACGCTGAGCGCAAGGGCTCACTGAG
ATATGCCAAGGGTCAGAGTCAGACCATGGCAACACTGAAAGGCCTAGTGCAGAAGGGCCCTGC
GGCCGC

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FIGURE 447

AAGTTTTTTTTTAATTATCATGGGACGGGTNTGGATTTAATGGGGGGAAAAGGGCGGAAAAG
GACAAGGATCCAAACTGGGGAATTTGTTGATNTTNGGGTCCCTNTCCGCTTTCCGGCCGGCAG
CGGCTGCCAGGGTATATTTCCCTTTTTTCCGATCCTGCAACAGCCTCTTTAAACTGTTTAAATG
AGAATGTCCTTGGCTCANAGAGTACTACTCACCTGGCTTTTCACACTACTCTTCTTGATCATG
TTGGTGTTGAAACTGGATGAGAAAGCACCTTGGAAGTGGTTCCTCATATTTATTCCAGTCTGG
ATATTTGATACTATCCTTCTTGTCTGCTGATTGTGAAAATGGCTGGGCGGTGTAAGTNTGGC
TTTGACCCTCGACATGGATCACACAATATTAAGCCTGGTACCTCATTGCAATGTTA
CTTAAATTAGCCTTCTGCCTCGCACTCTGTGCTAAACTGGAACAGTTTACTACCATGAATCTA
TCCTATGTCTTCATTCCTTTATGGGCCTTGCTGGCTGGGGCGGCCGC

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FIGURE 448

TAATTAAATGCACACACACACACACACACAGAAATTTTGAGAGCCATTTTAATATAATTG
CCTCCCTAGAAACATACCTTTTAGGGAATTTTATCACTAAACCACATGTTATTTAAATACGT
ACATGTTTAAACATAAATACATACATAAAATTCACATGCATACTTAACACTTATGTTAAATATA
TTCAATGTATATACATATGTACACAATATATGCATATATACATGTGGGTATGTGGTATGTGTG
CATGTGTGTGTATGGCCAGCTACATAATTTGTGGGACTAAGGGCAAATGAACTGTACGGCC
CTCGTTCAAAAATTAGGTGTGGGGCGGCCGC

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FIGURE 449

CCAGTTTGTCAAAC TACTACTCTTCAATGCTTCTACATAGCATTCTTTAAGGGCAAATTTGTA
GGCTATCCAGGAGACCCCAGTTTATTGGTTGGGAAAATACAGAAATGAAGAGTGTGACCCAGG
TGGCTGTCTTCTTGAAC TGAACACTCAGCTTGACAATAATCATGGGAGGAAAAGCAATCTGGA
ATAACATACAAGAAGTATTATTGCCCTGGATCATGAATCTAATTGGGCGATTTACAGAGTTT
CTGGATCAGAAAAGATAACCCACGATGGGAACAGGACTACCATCTGCAGCCTATGGGCAAAC
TGGGATTATTTTATGAATATCTTGAAATGATTATTCAGTTTGGGTTTCGTCACCTTATTTGTGG
CCTCTTTTCCACTGGCCCCTCTGTTGGCTCTCGTGAACAATATATTGGAAATAAGAGTGGACG
CATGGAAACTGACCACCCAGTTTAGACGCCTGGTACCAGAGAAAGCCCAAGACATTGGAGCAT
GGCAGCCCATCATGCAAGGAATAGCAATTCTGGCTGTGGCGGCCGC

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FIGURE 450

CTGTTAATGATTGCATTTGGCCTTGCTGGGGGGGCATTTTCTTGCGGATCAAACCCNCGCAA
GNGTNTTCATTTCCACGTGTCTGTCTTGTCAAGCACNCCCTTGGTGTCCAGGTTCCCTTCATGG
CCAGTGCTCGGGGTACAAANAAGGCGACATTGANTACAAGCCCCGTGCTCNTCGGCATGCTGG
TAACNCAGGACGTGCAGCTCGGGCTCTTCATGGCCGTCATGCCGACTNTCATAACAGGCGGGCG
CCAGTGCATCTTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTTGATTGGTCAGATTC
TTTTTTCCTAGCGGCGGTTTTTCTTTTATGTCTTGTTATAAAGAAGTATCTCATTGGACCT
ATTATCGGAAGCTGCACATGGAAAGCAAGGGGAACAAAGAAATCCTGATCTTGGGAATATCTG
CCTTTATCTTCTTAATGTTAACGGTCACGGAGCTGCTGGACGTCTCCATGGAGCTGGG

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FIGURE 451

ATCCCAGGCCTTTAGGCCCCGGAATNAACAATTGCAATGCACGTTTAAGGAAAAGGCCATNTC
GGATTCAGACCCTNACGGCCTTCCCACANTTTGTCNTCACTTGCAACAGGGCTTNGGGTGGGC
CTCCCGTTTNTAAAGCACCCCNCTATGAATGCACAGCAGGNCAANACCCAAGTCCCAAGACTG
CCTGGGCCTACTGGCCCCCCTAGCATTTGTGCAGAGGTNTCCTNTACAAGCTCCCATGTTGGG
AANAAGCACAGACCCACCAGGACCCCTGTTNTCCTCCTCAGATCCCCTTCCTGCCACCTTTTC
CCACTCCGGGGACTCAGCCCAGGACACCTCGNTGATTCCCTGCCCCCTTTACACCTGCAAGCAG
GGATGCCGGCATCAGAAGAATGTTTNGTGTTTGAAATTGTTTGAGGGGTTTGGGTTTATTTTT
GTTGGTTTTTCTTTTTTTTTTGCTTANGTGGGC

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FIGURE 452

ACGGCGCTCCCCGCCCAGAAATCAAAGCTCCGAGTCATCCGTGTGGGGCATTTCGTCCCCCCTGG
CACAGTTGGCCTCTTTCCAGAAGCCCGTTTTGTTTGTTCACGTNTAAATTCGCGTCGGTTCT
TATTTCTCTCCCTGGCAAGGTCTGAANACGGGTAGGAGAATAACCTGTGTCAGCGTGTATGA
TGCCGTCCCGTACCAACCTGGCTACTGGAATCCCCAGTAGTAAAGTGAAATATTCAAGGCTCT
CCAGCACAGACGATGGCTACATTGACCTTCAGTTTAAGAAAACCCCTCCTAAGATCCCTTATA
AGGCCATCGCACTTGCCACTGTGCTGTTTTTGATTGGCGCCTTCTCATTATTATAGGCTCCC
TCCTGCTGTCAGGCTACATCAGCAAAGGGGGGGCAGACCGGGC

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FIGURE 453

GTCATCTTTACATTCTAGTCCTCCTGCATCTCCTCAAGGTTCCCCTCACAAAGGTTACACACT
TATTCCATCAGCTAAATCTGNCAACTTGTCTGACTCCAGCCATAGTGAGATTTNTTCNCGGTC
CAGCATCGTGAGCAATTGTTCTGTTGACTCCATGTCTGCAGCTCTACAGGATGAACGGTGTTT
CTCTCAGGCCCTGGCAGTCCCTGAATCCACTGGGGCATTGGAAAAGACAGAGCACGCTTCAGG
GATAGGAGATCATAGTCAACATGGCCCTGGGTGGACACTCTTGAAGCCATCTCTAATCAAGTG
TTTAGCTGTCTCATCGTCTGTGAGCAATGAAGAGATTTCTCAAGAGCATATCATTATAGAAGC
AGCTGACAGTGGTCGTGGAAGTTGGACTTCGTGTTCAAGCAGCTCCCATGACAACTTCCAAAG
CCTTCCAAACCCAAAAAGCTGGGATTTTTTGAACCTTTACAGACATACCCATTTGGATGACCC

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FIGURE 454

TTATGCTTTTCTTGCAAGTATNTGAAAGGCCCGATTAAACAAAACAANAGTCCCAANACCCCTTT
TCTTTTTTGGGTGTATCNCTAGNTGCAGGTGCTGTGTTTCCTTAGTGTCATCTATTTGACTTAT
ACAGGTTACATTGCACCATGGAGTGGCAGGTTTTATTTCATTGTGGGATACTGGGTATGCAAAA
ATACACATTCCAATTATTGCATCAGTGTNTGAGCATCAACCTACAGACTTGGGTGTCTTTCTT
CTTTGATCTACATATTCTTGTATGTACCTTCCCAGCAGGCCTTTGGTTNTGCATCAAAAATAT
CAACGATGAAAGAGTATTTGTTGCTCTATATGCAATCAGTGCTGTCTACTTTGCTGGAGTGAT
GGTGCGACTGATGTTGACTTTGACTCCAGTCGTGTGTATGCTGTCTGCAATTGCCTTTTCAAA
TGTTTTTGGAGCACTATTTGGGGGGAGCGGCCGC

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FIGURE 455

GCCAGAAAACCCCTTAAGAAAAAAGCGNAGGAAATTTTCGCCAAAGCTGAAAGATCNCAGCGG
CCTGAGAAAAAAGTTTGCCCCAAAAGNNTGTTTNNAAAAGGCCAAGGAGGAAGCCCCCTTTT
NTCCCTNGGGCACTTGTATTTTTTNAACCCTGCTTCCCCAAATCCCCACTNATGAGGATCAG
CCCATGGTGGTATTTTTGCGATGATTCCTGNGTCCTGGAGTCTTNTCNGGTCAACGGTTTT
CTTGTTATATTTGCNCTATGTAGCTGATGTCAATTCAGGAGCNCGGAGNGAAGTACAAGCTTA
TGGATGGGTNCTCAGCCCACCTTTGCGGCTAGTNCTTGTGTCAGCAGCCCGGGCCATTGGAGCAT
ATNTTTTCTGCCAGTTTNCGGAGACAGCCTCGTTGTGCTGGTGGCCNCAGTGGTGGCTCTTN
TGGACATCTGGTTCATCTTAGTGGCTGTTCCAGAATCCTNTGCATGAGAAAATGAGNCCNGGT
TTCCTGGGGAGNTGCGGCCGC

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FIGURE 456

TCCTTGTTAAACATGAAGGGCCCCGGTAGCCATGGTTTGGCCACCTTCATTCCAAGCACCCCG
CCCCAGCAAGGCTCCTGGTACCTTTGT CANCCACTTGTTGTAGAAGGTGATGCCGATGGAGA
AGCAGTAGTAGANAAGCACCCAGCCCCAGGGTCAACNCCGCCTTCCACAAAAAGCCACATCGAG
GGCCNCCTCCCCATTCGTGGCGGCTGCAGCACCGGAGCTCCTGAGTCAGCGGGGGCAGGCAC
CCCTNTTGAATACAATGTGCAGGAAGAGCCGGTGGAGTTAGACCACAGCTTTCACCAAGAACG
TCTCCAGGCTGGAGGAGCTCTCTGCAGCTCCATGATTCGGAACCATCAGCAGAGCCCCAGGCA
GAGTCCTCACCTAAGGGGCTGGTGGCTGGTGCTGACCCTTCCCATGGTTAATTGGATGCAGCG
CTCACAGGTCCCAAGGTCTGCTCGGCCCTGGGAGCTCCAGGCCGGAATTTTGGCCAGTGTGGCC

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FIGURE 457

TGCTCCCCTCTCTCCTCTCCACAATCTCACCCATTNTGCATGTGCCGGTGCCCTTTCCTGTCA
TCCCACCTTTCCTCTGAGACTGTGTTCTTTTTCTTAATTCTGTTTTCTGTTTGTTCTTTAGGT
TGCATAGTCTTTATTGATATTTCTTTGAATCACTGATTCTTCTGCCAGCTCAGTCTGTTGTT
GAGCC

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FIGURE 458

GATTACAAAAACAAAAATGTTTAATTTAAGTGAAAGGGNTTAATAATTTTAATCTGGGANTT
AATAATTCAGTGGAAATTTTAAATGAATAGTTACTATAATCNCAAATAATTGAGAGTCAACTT
TNTTTTCCCCAAAACATACATGAAAGGTCTGTGTGTGTAAGCTCTGATTTTCAGGACCCCTA
TTTNTGGAAGCAGAGTAACTGGAAATANTAAGTCAAGATNTGAAAACCATTTGAAGTTAACCA
AAAAGCACAGGCTACTAAGGCAGGTGCAGCATCAATGATTCACTACATGGTTCTGATATCAGC
TCGCTTGGTACTACTCACTTTGTGTGGATGGGTACTTTGTTGGACCCTCGTCAATCTCTTTTCG
AAGCCATTCAGTCCTCAATCTCCTTTTCCTTGGCTACCCGTTTGGTGTTTATGTTCCCTCTTG
CTGTTTTTCATCAAGATAGTAGAGCACATCTTCTTCTCAC

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FIGURE 459

CGGTCCGAATATCCGGAACCTGACCCAATCCTTGGCCTTTGAAACTTTCATTTTTTTNGTTGTC
TGCCTCAACNCGTCAGGTGGNGCCCAAACNTTGGTAAAGTCNAGATCCGGGGGAGGGTACTTC
ATGGCCTTGGACTCCATATTNTTNTGTCATNTACGTGGTGAAAGCCCTGCTCAAGATCATCGCC
CTGGGCCTCTTGGTACTTCTTTGACTTCTGGAACAATTTGGACTTNTTCATTATGGCCATGGC
CGTGCTGGACTTCTTGCTGATGCAGACCCACTCCTTCGCCATCTACCACCAAAGCCTCTTCCG
GATCCTCAAGGTCTTCAAGAGCCTGCGGGCCCTGAGGGCAATCCGGGTCTGCGGAGGCTCAG
CTTCCTGACCAGCGTCCAGGAAGTGACAGGGACCCTGGGCCAGTCCTTGCCGTCCATCGCAGC
CATCCTCATCCTCATGTTTACCTGCCTCTTCCTCTTCTCCGCGGTCTCCGGGCACTGTTCCG
CAAATCTGACCCCAAGCGCTTCCAGAACATCTTCACCACCATCTTCACCCTCTTCACCTT

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FIGURE 460

CAAAGAAAAGAAAAGGGCACTTCGGAGCAAATCATACTAGGCCTTTGATGCTTTAATTCTT
CTTCAGTTCATTAAAAGTAACTACTAAGGAAAGGTTAAAACTTCCCCTCAAAAAGGAATCAA
CCCCAGGAAGTAATCATTTACAACGATTTTCCCAAATTTTGACAATCTGTCCTGGAAAGCAAA
CCCCTTTTAAAATCTAATGTCTGGGCTTTGAGTATTAGCTCATTTAGGGTGGACAAATGCATT
ACTGTTTTCAAAGTCTCACATTTATTTCAGTATTTCTCCAAGTTGCTATCTACTCAGCCTTAT
GAATGCCCCCTCGCTTTTCTAAGGCCATGTGAAAATCACGGCACTGCCCTTAGCCTTGTGTCAT
CTGCTTTTTCGTTCTGCGATATGCCAGTTCCCAAATCAATTATAGGTACCTGTTTAGGAGAG
AGGAAGATTTTACCTCTCAAAGGGTGAGATTTGAAATTTACACTAAAAGACAACCTTTACATT
TAATGCTTCACTTAATGAGACATTCTTTTTTTTATAAGTCTATTTTCTACTCAGTTTCAG

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FIGURE 461

ATGCAGTTGTTAAGGTTTACTGCCCTTGCCATTTTAATTATGAGGCTAAAGATGTTTTTGACG
CTGCACATGTGTGTATGGCTTCCTTGATATGCTCTCGCAGTTCTTTGGTGGCTTTTTCGCAGA
GTTTCGTTTTGATAATGTTATCTTTGGCATTCTAACAGTGATGTCAATACAAGGTTATGCAAAC
CTCCGTAATCAATGGAGCATAATAGGAGAATTAATAATTTGCCTCAGGAAGAAGCTTTTACAG
TGGATCAAATACAATACCACATCAGATGCTGTCTTCGCAGGTGCCATGCCTACAATGGCAAGC
GTCAAGCTGTCTACACTTCATCCCATTTGTGAATCATCCACTTTACGAAGATGCAGACTTGAGG
GCTCGGACAAAAATAGTTTATTCTACATATAGTCGAAAATCTGCCAAAGAAGTAGGAGAGAAA
TTGTTGGAGTTACATGTGAATTATTATGTTTTAGAAGAGGCATGGTGTGTTGTGAGAACTAAG
CCTGGTTGCAGTATGCTTGAAATCTGTGATGTGGAAGACCCTTCCAATGCAGCTAACCC

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FIGURE 462

GAAGTGGGCCCCAACATNTGACAAAACCTCCCAATGAANGATTCCCCGCTTGAAACAATGGGGGC
AGGGCTNCCGGCTTCGAGGGGCAAGTTTCAAGCATTCAACAAAGGGTCCCCCGGAAAATTCN
ANGGNGTCCAACACTCAGTGCCCNAGCCCAGCCNCAGAACCCAANACATAAGGCATGTCATC
CACAAGCTCTCCTTTGGGGACAACGCTACAGGTCCAGAACATCCNCGGAGCTTTCAATGCTCT
CGGGGGAGCAGACAGACTCACCTCCAACCCCCCTGGCCTCCCACGACNTACATCCTGAAGATTG
TGCCCNCGGTTTATGAGGACAAGAGTGGCAAGCAGCGGTACTCCTACCAGTANACGGTGGCCA
ACAAGGAATACGTCGCCTACAGCCACACGGGCCGCATCATCCCTGCAATCTGGTTCCGCTACG
ACCTCAGCCCCATCACGGTCAAGTACACAGAGAGACCTGCGGCCGC

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FIGURE 463

TATCAAGGGGCGGGTTTTGGATTTAATGGGGGGAAAAGGGGGGAAAAGGCCAGGATCCNAACT
GGNGAATTTGGTGATTTTNGGGTCCCTTTCCGCTTTCCGGCCGGAAGGGCTGCCAGGGTATA
TTTCCTTTTTTCCGATCCTGCAACAGCCTCTTTAAACTGTTTAAATGAGAATGTCCTTGGCTC
AGAGAGTACTACTCACCTGGCTTTTCACACTACTCTTNTTGATCATGTTGGTGTTGAAACTGG
ATGAGAAAGCACCTTGGAAGTGGTTCCTCATATTTATTCCAGTCTGGATATTTGATACTATCC
TTCTTGTCTGCTGATTGTGAAAATGGCTGGGCGGTGTAAGTCTGGCTTTGACCCTCGACATG
GATCACACAATATTAAAAAAAAGCCTGGTACCTCATTGCAATGTTACTTAAATTAGCCTTNT
GCCTCGCACTCTGTGCTAAACTGGAACAGTTTACTACCATGAATCTATCCTATGTCTTCATTC
CTTTATGGGCCTTGCTGGCTGGAGCGGCCGC

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FIGURE 464

AAAAGGCCAATTTTAAGCAAAATATAACAAAACGAGAAGTGGAGGATGACTTGGGTNTNAGCA
TGCTGATTGACTCCCAGAACAACCAGTATATTTTGACCAAGCCCAGAGATTCAACCATCCCAC
GTGCAGATCACCACCTTTATAAAGGACATTGTTACCATAGGAATGCTGTCCTTGCCTTGTGGCT
GGCTATGTACAGCCATAGGATTGCCTACAATGTTTGGTTATATTATTTGTGGTGTACTTCTGG
GACCTTCAGGACTAAATAGTATTAAGTCTATTGTGCAAGTGGAGACATTAGGAGAATTTGGGG
TGTTTTTTACTCTTTTTCTTGTTGGCTTAGAATTTTCTCCAGAAAAGCTAAGAAAGGTGTGGA
AGATTCCTTACAAGGGCCGTGTTACATGACACTGTTAATGATTGCATTTGGCTTGCTGTGGG
GAGCGGCCGC

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FIGURE 465

CACTGGCCAAACCATTATATGGCATACTCTGGNTACGTGGTCTGCCTGTTATTGGAAAGATAT
ATTAAGAATCCAGTTNTGGATTGCAGCTGTTATTTTTTTGGGAATGCTTGAAAAAGCAGTTT
TTATAGTGAATACCAAAACATCAGCAACACTGGACTGTCAACCCAAGGCTTATTGATATTTGC
GGAGTTGATTTCTGCGATTAAAGAGGACGTTGGCTCGCCTTCTCGTGATCATTGTGAGCCTGGG
CTATGGCATTGTGAAGCCTCGTTTAGGAACAGTCATGCACCGGGTGATCGGACTGGGGCTTCT
ATACTTAATCTTTGCAGCTGTTGAAGGCGTGATGAGAGTCATTGGGGGTTCTAACCATTTAGC
TGTTGTTCTTGATGACATTATTTTAGCAGTTATTGACTCCATTTTGTGTGGTTCATTTTTAT
TAGTTTGGCACAAACTATGAAGACCCTAAGGCTAAGAAAGAACACTGTGAAATTTTCATTATA
TAGACATTTTAAAAATACTCTGATCTTTGCTGTGCTGGCTTCTATAGTGTTTATGGGGTGGGC
GGCCGC

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FIGURE 466

TGGATGGTACCCTGGCCCN TCCAGAGTCCCAGGGCAATGGGTCCATTTTCAGCCCAATGTGGT
GTACATTACCCTACGCTCCAAGCGCAGCAAGCCGGCCAATATCCGTGGCACCGTAAGCCCAAG
CGCAGGAAAAAGCATGCAGTGGCATCGGCTGCCCCAGGGCAGGAGGCTTTGGTCGGACCATCC
CTTCAGCCGCAGGAAGCGGCAAGGGAAGCTGATGCTGTAGCACCTGGGTACGCTCAGGGAGCA
AACCTGGTTAAGATTGGAGAGCGACCCTGGAGGTTGGTGCGGGGTCCGGGAGTGCGAGCCGGG
GGCCAGACTTCCTGCAGCCCAGCTCCAGGGAGAGCAACATTAGGATCTACAGCGAGAGCGCC
CCCTCCTGGCTGAGCAAAGATGACATCCGAAGAAATGCGACTCTTGGCGGACAGCGCAGTGGCA
GGGCTCCGGCCTGTGTCTCTAGGAGCGGAGCCCGTTTGCTGGTGCTGGAGGGGGGTGCGGCCGC

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FIGURE 467

AACCTGTGACGTTAGTGTGTTCTTACTAGCTTTAATTTGTATGTAGCAATGAATTGTGAATCT
TAGTGCAGTGGGTTTTTTTAAAAAACTCAAAAAGCTGGGAATTAAGGGTTTCAGTAATAATGC
TATACCGAGGTGCTTGCATTGTATTTTCATAATTTTGTTACAAACCAAAATTATTTTAAATGAG
AACAGTCTTGGGTTCAGAGGTGTGATGCCAGAATGTATTTTCGTACTGTTAGGCCCTTGGAAC
AGATACCGGTGCTTTCTGAAAGATGAAAGAAATGCAATGGGTGCTCTTCATGCAAGGTTGCAA
ACCTACCAAGAATGCATAATAGTCTCACTTTTCCCAATAAAGAGATGCGTGTGACTAGTTTT
GGACTTTTAACCTTAATGGGGATGGCGGCCGC

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FIGURE 468

ATGGTCCTGGGCATCCATTGACCTGCTTTCTGTCCCTGTAGATTAGTTTTGCCTGTTCTAGAA
TTTTATGTATGTAAGGGAATGATGACTATGTATGTTTGTGTTGGCTTATTTTACCAGCAAG
TTTTTGAGGTTTCATGTTATTGTGTGTATCAGAAGTTAGTTTCTATTTATTGCTCAGTAGTATT
TCATTCTGTGAATTTACCATGGTCTGTTTAATATATTCATCTATTGATGATGAACATTTAGAT
TACTTTTCGTTTTTGCCTATTAAAAATAAAGTTAGTATGAATATGCATGTACAAGTTGTATTG
TGGATATACTTTGTGATAATAACTAGAACCAGGAGTGGTTCAAAATTTAATTTACACATCTAC
TCCCTGTGTTATTTGCC

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FIGURE 469

TGGCTGAAAATTTTGGAAAAAGAATATTTTCTTTTAAATAGGTAACCTTAANATATTTTATT
CATTGTCGCCCAGTGTAACAAGAGGAATCAGTTAAACTCCTGTGTCCAGGCCAGTACCNCCAA
TTAATGCACTTGCTAGCTACTGAATTCAGCCAAGATAAATAATTAAATCTAGTGCTTCAGG
AAATGAGTTGATCATCAAGGGAGTTAGAATGGAAAAACATTTATGNATAATTTTAAAGGACAT
TGGACTTAACTGTTTGGGAATGAATGAGCTTGATTTTTTCTATACATATTATAAGTTAATATAA
AAAAAGGCTTTGGGTAGACTCCGTATGACCTTATGTATTTGATTTCATGAGTTTCATTTTCTG
CAGTAACTTTATCATTCATTTTTCATCTCTTAGGCTGGAATGTAGTGGAAAAAGAACTGAACT
AGGAGTTAGAAGATTTAAGTTTTGGCTCTGGCTCCATCACATACTGGCAGTGATGATCTTAGC
CAAGTTTGAACGCTTATGGCGGGGTCTTGTTTATTCATTTTCAGTATTTCCAAC

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FIGURE 470

AGTTACCCTCACTTTACCAAGGACTTTGCTCGGCGTTTATTAGTGCTGTTTGGGTAGCATTCC
CATTGCTCACAAAGCTCTGTGTGCATAAGGACTTCAAGCAGCATGGTGCCCAAGGAAAATTTA
TTGCTTTTTACCTTTTGGGGATGTTTATTCCTTATCTTTATGCATTGACCTCATCTGGGCAGT
ATTTGAGATGTTTACCCCTATCCTCGGGAGAAGTGGTCTGAAATCCACCTGATGTTGTGCT
GGCATCCATTTTGGCTGGCTGTACAATGATTCTCTCGTCCTATTTTATTAACCTTCATCTACCT
TGCCAAGAGCACAAAAAAACCATGCTAACTTTAACTTTGGTATGTGCAATTACATTCCTCCT
TGTTTGCAGTGGAACATTTTTTCCATATAGCTCCAATCCTGCTAATCCGAAGCCAAAGAGAGT
GTTTCTTCAGCATATGACTAGAACATTCCATGACTTGGAAGGAAATGCAGTTAAACGGGACTC
TGGAATATGGATCAATGGGTTTGATTATACTGGAATTTCTCACATAAC

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FIGURE 471

GAGGCATTGTGAATGGTTGCAGTGNAGCTTAGGTATAACATCATCAAGTGTGTTACACGCGG
GGTCGGGTTTAATGGAGTGTCCACGCGGAGATAACTGCGATATTGGAACACCTGTGAGAGAGA
TTGTTCTATAGGGTGGAATATTCAGAGTTACATTCTTGGAAGTTTCTGTTTTTACTTGCATCA
AACACCCCTCTGTTGTTCTCCATCATCTTTAATAGCAACTGGAGACCACTTTGGTCATTGGTA
AGGGGGTGCATTCTCCTCACAAAGGGGTTTTATGGACTTCCTCAGGCGGAGAGCTTCTGAGAA
CACAGGCAGGATGGAAAAAGACTACTAGCCACTTTTGCTTTCCCAACCCCCCTTAATGCCATC
CTTCATTGTCTTTCTGGCTTCTCTTCTTCTGGCACAGTACCATTTTGGGTCTGTGCCCCAGTG
TGGAGCAAACATTGCCTGTCCCATTCTGATATACTTCAGAATTTGAGAGCAGAAGTTAATGT
GGAACAAAAGTTTTACCATCTCTCAAGCCCCAAGGACTGGAGCC

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FIGURE 472

ATTAGGCTGTTTGGGAGCATTCCCATTTGCTCACAAAAGCTTTGTGNGCATAAGGACTTCAAGC
AGCATGGGCCCAAGAAAATTTATTGCTTTTNCCTTTTGGGGATGTTTATTCCTTATCTTTAT
GCATTGTACCTCATCTGGGCAGATTTGAGATGTTTACCCCTATCCTCGGGAGAAGTGGTTCTG
AAATCCCACCTGATGTTGTGCTGGCATCCATTTTGGCTGGCTGACAATGATTCTCTCGTCCTA
TTTTATTAACCTTCATCTACCTTGCCAAGAGCACAAAAAAACCATGCTAACTTTAACTTTGGT
ATGTGCAATTACATTCCTCCTTGTTTGCAGTGGAACATTTTTTCCATATAGCTCCAATCCTGC
TAATCCGAAGCCAAAGAGAGTGTTTNTTCAGCATATGACTAGAACATTCCATGACTTGGAAGG
AAATGCAGTTAAACGGGACTCTGGAATATGGATCAATGGGTTTGATTATACTGGAATTTCTCA
CATAAC

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FIGURE 473

GATTGCAAGGAGGATTTTATATGATAGTCATAGCTTGTCTTTAAAAGTTTGGTATGTGATAAT
ATCAGANCAGTAAAAGGCTATTTACATTTTAAACTAAATCTTTATTAAATAATTATTTAC
AAGTTAGTAATTATTGATATTCTTCTTCAGGGACTAGAGTTCCTATGCTTCCTAAACTGACTT
TTAAGGAAAGATGAGACTATATTCAGTGCAGTTTTAATATGACATATTTTATTATCTCTTATT
TTTTAAATTGATATTTTATGAAGGAGTCTATGGACTATAATACGAAAATTCTGGTTGGGGAGG
CAGGAAACCTGGCTTTCAAGTACACTCCAATAGCTTTTATATAAAATTCAGGTGTTCTTTTTC
TCTAATACTTGAAATAGCTATTTTCATTTTCATGTCATTTTCTGTACTTTTCCTGATACTTTT
AAACATTGTTTTATTTTCAAATGAACAGCC

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FIGURE 474

TTCCCGCAATTTTCAGAAAAATGGGANTAAAAGAACTATTTTGTAATAAAAAAGCTTCCA
TTTTTAATGACCANCATGTATTAAGATGGAACNTACTNTACGAAANCGAAGTTNTATGGTNTC
GAAAAGCCCGTGCCTGTTTAAACTTGATCCTAACTAAAAACAGACTTGAGTGGATATNAGAA
TGTTGGTTAGTGGCAGAAGAGTCAAAAAATGGCAGTTAATTATTCAGTTATTTGCTACTTGTT
TTTAGCGAGCCTCATGTTTTTTTTGGGAACCAATCGATAATCACATTGTGAGCCATATGAAGT
CATATTCTTACAGATACCTCATAAATAGCTATGACTTTGTGAATGATACCCTGTCTCTTAAGCA

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FIGURE 475

TTTAGAAATGGTATGGCAGAATCCAGAAAATGCTTTATTGAAGACAGTCATTGATCACCAGTA
CACTTGATCTCCAGTACAGACATATGGTGGAACAGAAGCCTGGATACAGGACTCAGACTCTTA
CTGGTTGGTATCATACTGATCGTTTGATTGAGTTCATCTCTAAATTGCAGTTTGCCGTGACT
GTGCTTTTGACATCATGGACAGAGAAAAACAACGTCGAAAACAACTGCCACTTTATGTATA
CTCAACATTGTCTTTTCTCCATTCGTGTTGGTCATCATAGTTTTTTCTACACTACTCTCTTCT
CCCTTACTCCCTCTTTTCACCCTTCCTGTGTTCTTGGTGGGGTTTCCCCGACCTATTCAGAGT
TGGCCAGGAGCAGCAGGCACCACAGCCTGTGTGTGTGCAGATACAGTGTACTACTACCAAATG
GTGCC

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FIGURE 476

GGGTGCTCTTTTTCAATTCAGGAACATCAACATTTANTAAACNGTGGGGTGGGATCCTTACAA
ATCATCCTGCTTTTTTGNANATCACTGGCTACTAAGGCAGGTGCAGCATCAATGATTCACTAN
ATGGTTTTGATATCAGCTCGCTTGGTACTACTCACTTTTGTGTGGATGGGTACTTTGTTGGAC
CCTCGTCAATCTCTTTNGAAGCCATTCAGTCCTCAATCTCCTTTTCCTTGGGTANCCGTTTGG
TGTNTTATGTTCCCTCTTTGCTGTTTTTCATCAAGATAGTAGAGCACATCTTCTTCTCACAGACT
ACAAATATGTGGTTCAGCACGAGGCAGTAGAGGAAAGTGCCTCGACTGTGGGAGGCTTGGCCA
AATCCAAAGACTTTCTCTCCTTGTTGCTGGAGTCGCTAAAAGAACAGTTTAATAATGCCACAC
CCATCCCCAC

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FIGURE 477

GGCCACNCTGGCCAAATAAGGGCAAAAAGCTTTATTTTTTTTGAACAGGAAAACATGTTTTTTTA
AATTCACATGTTTTGTATGAGACTTTTGCGAAGCAAGGCATGAACTGCTAGGTATTATTAAGA
ATGAATGATTTTTGCATTTAAGTTGTTTGAAGGCATGTATTTTGAAAAATATCTGTTACAAAT
TTATAATTTCAAGACAAATTGAATCTTATTTTATAATACTTTTGGAAATTCATTAATAAGGCT
AAAATTTGAGGAATATAACTAATTTTCAGCCTTAAGACATTTAAGTTTGGGAAGTCCTTGCTAT
TCAACAGAATAACAAGAAACTTCAGAATGTATCACTCTCCTGAAAAGAAGATATTAATAAGC
CCTTTTATTTATGGTTATAGTTTTATTTATAGTCTCAAAATTCCTAAAGCAATGCTACAACCA
TTGAATTTGCCATATTTTGTATCAGTGCTGTTAATTTGCTGTTGCCTCAAGAAAAAGTGCTTT
TTCTCCATGGATGAGGCGGCCGC

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FIGURE 478

CACACACACACACACAGAAATTTTGAGAGCCATTTTAATATAATTGCCTCCCTAGAAACAT
ACCTTTTAGGGNATTTTTATCACTAAACCACATGTTATTTAAATACGGTACATGTTTAACATA
AATACATACATAAAATTCACATGCATACTTAACACTTATGTTAAATATATTCAATGTATATAC
ATATGTACACAATATATGCATATATACATGTGGGTATGTGGTATGTGTGCATGTGTGTGTATG
GCCAGCTACATAATTTGTGGGACTAAGGGCAAATGAAACTGTACGGCCCTCGTTCAAAAATT
AGGTGTGGAGCGGCCGC

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FIGURE 479

ACCAATCAGATGTATTTAGGGATTTGGGATATTCTACCAGGTGTTGTGAAATGTCAAATGGAA
CAAGCGTTTCATCTTGATTTTGGAAGTGAATTGGAACCAAGAAAAGAAATAGTGCTATTTGAT
AAGCCAAGTAGAGGAAGTACTGTACAAAATTTAAAGAAATGGTCTATAGTCTCTTTAAGGCA
AAATTGGGTGACCAAGGAAACCTCTCTGAACTGGTTAATCTCATCTTGACGGTGGCTGATGGA
GACAAAGATGGCCAGGTTTCCTTGGGAGAAGCAAAGTCGGCATGGGCACTTCTTCAACTGAAT
GAATTTCTTCTCATGGTGATACTTCAAGATAAAGAACATACCCCCAAATTAATGGGATTCTGT
GGTGACCTCTATGTGATGGAAAGTGTGAATATACCTCTCTTTATGGAATAAGCCTTCCTTGG
GTCATTGAAGTTTTTTATTCCATCTGGGTTTCAGAAGAAGCATGGATCAGCTGTTACACCATCA
TGGCCAAGAAAGGCCAAAATAGCCATAGGACTTCTAGAATTTGTGGAAGATGTTTTCCATGGCCC

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FIGURE 480

CCCGCCATGACTCGGAGACTGAGGACATGTATGGGACGACNTGCTACATGGCCCAGAGTGCCG
GTCATCTGTCACCAGTGACAGTGAGGGGGCCCATGTGAATACCCTTCACTCAGGGCCAAACGT
GCCCCAAAGAGGATGTTTTTCAGCAGAATCATTTATTCTGGCTTCAGAATTCAAGTCCTTCCT
CTGATCGAGTTAGGCAATAATCTGGGAGGGGAATGAGTGCAAAAAGATGGATATGTCTGTGTT
GGAAATAAGTGGCATCATCATGAGCAGGGTCAATACCTATCAGCAAGGAGTAGGTTATCAGAT
GCTGGGAAATGTTGTCACTATTGGATTAGCATTTTTTCCATTCTTACATCGACTTTTCCGTGA
GAAGAGCCTTGACCAACTAAAGTCCATTTTCAGCTGAGGAGATCTTGACTCTCTTTTGTGGGGC
ACCACCTGTTACACCTATTATTGTTTTGTCGATAATTAATTTTTTTGAAAGATTGTGTCTTAC
TTGGATGTTTTTTTTCATGATGTGTGTGGCGGCCGC

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FIGURE 481

GGCCACACTGGCCAAAGAGCATATTTGATCACTTTGATTCTCTGTTCTTTTCTCTCCGCGGTG
TGTGTGGCGGCCGC

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FIGURE 482

AAAGACCCAGTCATGGCAAGCCTCCAAGCATCAGTTCACCATGGGGAAAGCATGTGTTCAAAG
CCATTCTGATGGTCCTAAGTGGCCCTTATCCTCCTCCACTCAGCATTGGCCCAGTCCCGTCGA
GACTTTGCACCACCAGGCCAACAGAAGAGAGAAGCCCCAGTTGATGTCTTGACCCAGATAGGT
CGATCTGTGCGAGGGACACTGGATGCCTGGATTGGGCCAGAGACCATGCACCTGGTGTGAGAG
TCTTCGTCCCAAGTGTGTGGGCCATCTCATCAGCCATTTCTGTGGCCTTCTTTGCTCTGTCT
GGGATCGCCGCACAGCTGCTGAATGCCTTGGGACTAGCTGGTGATTACCTCGCCCAGGGCCTG
AAGCTCAGCCCTGGCCAGGTCCAGACCTTCCTGCTGTGGGGAGCAGGGGCCCTGGTCTGTCTAC
TGGCTGCTGTCTCTGCTCCTCGGCTTGGTCTTGGCCTTGCTGGGGCGGATCCTGTGGGGCCTG
AAGCTTGTCATCTTCCTGGCCGGCTTCGTGGCCCTGATGAGGTCGGTAGCGGCCGC

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FIGURE 483

CAAAACGATTTTATTGCCAAACCCTGTGCACTCCGATTGGCATCGAGGACAGTGGTCCTTATC
AGGCCCAACCCAATGCCATCCTTGAAAAGGTGTTTCATATCTATTACCAAGTATCCTGATAAGA
AAAGGTGNAGGGCCTGTCAAAGCAGCTGGATTGGAATGTCCGAAAAATCCAATGCTGGTTNGC
CATCGGAGGAATCAGGACAAGCCCCAACGCTTANTAAATTCTGTGAAAGCATGTGGAGATTTC
ACATTTTATTTATGTATATTCTGCTATGGAATTAGATTTCTCTGGTCGTCACCTTGGTTCTGG
GACATCCGACAGTGCTGGCATAACTATCCATTTTCAGCCTCTTTCAAGTGGGCTTTATCACTAT
TATATCATGGAATTGGCCTTCTATTGGTCCCTTATGTTTTCTCAGTTTACAGACATTAAAAGA
AAGGACTTCCTGATCATGTTTGTGCATCACTTGGTCACCATTTGGGCTTATCTCCTTCTCCTAC
ATCAACAATATGGTTCGAGTGGGAACTCTGATCATGTGTCTACATGATGTCTCAGACTTCTTG
CTGGGGGCGGCCGC

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FIGURE 484

TCTAGGTCCATTGTCACCTTTTCTGGCACGACAGCCTCCGCCCCACCGCATTCCCCAGGCCAA
GCTGGTGGCCATGCTTCAGACACGAGACCCACCAAGGGCCTCCGCCAGACCACGGTGCCTGCC
AAGGGCCACCCTGAGCGCCGGCTGCTGTCAGTGGGGGATGGGACCCGTGTTGGGATGGGAGCC
CGAACCCCCAGGCCTGGGGCGGGCCTCAGGGACCAGCAAATGGCCCCATCCGCTGCTCCTCAG
GCCCCAGAAGCCTTCACACTCAAGGAGAAGGGGCACCTGCTGCGGCTGCCTGCGGCATTCAGG
AAAGCAGCTTCCCAGAACTCGAGCCTGTGGGCCTAGCGGCCGC

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FIGURE 485

CTGGCCAAACATATGGGGGATGAAAATAAANAATTACATATGAAGATTCAAACCATCCNCA
GGAATGAATTACACGCCCTCCCAGGCATCAANAAGCNCAGGAGGAGNCAGTTATGAAGTCAAA
GGTATAGATGCAAAATGAACCAACAAAAGGAAGTTTTTTTTTTGAAAAGCAGTAAAAAAAAGCT
NCAAGAAACACCCAANTGAAGCAAATCACGTACAAAGANTGAGACAAATGCTGGCTTGCCCTC
CACATGGTTTACTGGACAGGGTCATAACAAATGTTACCATCATTGTTCTTCTGTGGGCTGTAG
TTTGGTCAATTACTGGCAGTGAATGTCTTCCTGGAGGAAACCTATTTGGAATTATAATCCTAT
TCTATTGTGCCATCATTGGTGGTAAACTTTTGGGGCTTATTAAGTTACCTACATTGCCTCCAC
TGCCTTCTCTTCTTGGCATGCTGCTTGCAGGGTTTCTCATCAGAAATATCCCAGTCATCAACG
ATAATGTGCAGATCAAGCACAAAGTGGTCTTCCTCTTTGAGAAGCATAGCCCTGTCTATCATTC
TGGCTCGTGCGGCCGC

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FIGURE 486

TGCATCGTGGGGTATGTACAATGTTTACGCATGTGAGTGTGTGTAAAGTGTGTGTATNAAGTG
TGTGTGTACATCTGTGCAGCTGGTCACCAGCATGTACCTTCACAAGTTAGATTTTGCTGGCAT
ATCCACGAGCTGTCACCACTGTGCCNTGGGCATTGAGCTTTTGAGGCTTGTGTGTTGGCCTG
TCCCAGGGCTCTGCCATCGTCAGTATTGGCCCCACTCACAGATGTTCTTTCCTGGGTTGGGCC
AGCTCCTTTTGGACACTTTTGAGATCCACCTCGGGCCCGTCTGCGTTTGCGATGCTGCTTTTN
TGTGGCTCCTTCCGGCTACTGGGACTGTTCCCTTCTGGCATTGCCTTCGGCAGCACTTCGAGG
AACTCAGCCTCCAGGGCCTCCTGTTGTCCTTGAAAATGCAGTTTTATTTCATTATTTTATTT
ATTTATTTTGGG

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FIGURE 487

CTCAAAATTAAAGTATCAAACAGGGGTCCTCAGAACTGTCTCACTTCCTCCTGCTCCCATCAA
TATTAAAGCCTAAAACTCAAGAATCATTCTTAGCAGTTTTTTTCTCTTTTTTCTTTCTTTCT
TTTTTTTCTTTTTTGAGACGGAGTCTCACTCTGTCGCCCAGGCTGGAGTGCAGTGGCGACAGA
GTGAGAC

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FIGURE 488

GTGTGTGAGTGTGTGTGTGTTTAATGTACCTAATTCTGTAAAGGATTTTAAGTGATTTTTTCA
AAGTGGACCCAATAAAATAAAAACAATATGCGTGCATGTGTTTTATAAAAGTAATAAACNAG
TTATTCTGCTTTTTCTAGTCTTAGTTACTTACTTACATATTTATTTGGGGGGTGTGATGTTCT
TTTTAAAGGAACCTCTGTGACACCTGTTACTCCGGC

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FIGURE 489

GCAGCTGCCTATTGCACTTGTGAAAAAGGTTTGTATGTTCAACACTGCTGGGNTGGCTCANAG
TTGGGAGTGAATCCTCCAAGGGATAAGCTTGGAGAACTTTTGAACAGTCAATCTGTAAAGGT
GTTTGCAATCCCAAGGNCAATGGACTAGATTATGAAGGCTCTCGGGTGGACCCACTGTTCCCTC
TCTGTTTATTAAGCTTTTGAAGGAGAGAGATGAGGGCAGGACATGTGACAACGGTGCTTTTC
CTTATGCNTATATCGCTCTCCAACAGCATCCTTTCCAAATNTATAGCGCTTCAAAGATTCCAG
GACAGATCGGGAAGAGCCAGTGTCCATAGAAACCTGGGGTTGTTCAGAAGAACGGTGTTCTCT
GTGTTTGTGACGGTGCCTGT

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FIGURE 490

GGTTTTGTCCTTCGGTATGACAACACAAAAAGCAAGCCAGTGGGGATTGTCNTGTGGGGCCCN
TGGACCTGCCAAACATCTCCGGGNGCATGCAAAAAGGTCTCCTACTTTCACTGCACCCTCATC
GGATACTTTGTAGGCCTGCTCACTGCTACTGTGGCGTCTCGCATTACACGGGCGCCAGCCC
GCCCTTCTCTATTTGGTGCCATTTACTTTATTGCCACTCCTCACGATGGCCTATTTAAAGGGC
GACCTCCGGCGGATGTGGTCTGAGCCTTTCCACTCCAAGTCCAGCAGCTCCCGATTCTTGAA
GTATGATGGATCACGTGGAAAGTGACCAGATGGCCGTCATAGTCCTTTTCTCTCAACTCATGG
TTTGTTTCCTCTTAGAGCTGGCCTGGTACTCAGAAATGTACCTGTGTTTAAGGAAGTGGCGTG
TGACTGGATTTGGCATTGAAAGGGAGCTCGTTTGCAGGAGAGAGGTGCTGGAGCCCTGTTTGG
TTCCTTCTCTTCCTGCGGATGTAGAGGTGGGGCCCCTTCCAAGAGGGACAGGCCTCTCCCCAGC

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FIGURE 491

AAGACTCCCAAGGAAGTTGTTGAACTATATTTGGANAAACANGCCACTGAATATTATCATTTT
TCCTTTTAAANAGAGTTTTGTAAGGGGGNAAACATGCATTTTTATCCAGACAATTTATCCAAA
GCATTTCAGAACATGAAGTGCTGATGAGGGCACCTCTTGNTGAGTCCNTAAGCTATCAAG
TGTTCTTCTCAAGGACACATTTGGAAGGTTTTAACATTGAAANTGAGCGGAGGACTTGGGGGC
AGAGCAGCACAAAGAAACAGCCTTACACTGGGCACATGGAGGAGACGTCCACCCTGCAGCCAG
GATTGGGGTTCACGTCACTGCCAGAGCTACACTCGCCTTCTGCTTCCACGGTCCTGTTAATTC
TAGATCAGAGAGCAAGAAAAAGTACAGAACATATCCTCTACGGTTATTTCTGCTTTCTAAT
TAAAAAAATAATAACCATGGCAAGAGAGAAAGAAAGAGAAAGTACTCAGAGGCTGACACTGAC
ATTTCACTTCCTCGCTCTCCTAAGTTTAATTACAACAGCACGTGCAGC

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FIGURE 492

TGCAGCATTGGCAGCAACAAAAATTTCTAGTTTGGNTGATGATTTTGGAGAATTCAGCCTTTT
TGGGGAATATTTTGGTCTAGCACCTGTTGGGGAGCAGGATGACTTTGCAGATTTTATGGCTTT
CAGTAATAGCTTTATTTTCATNTGAGCAAAAGCCGGATGACAAATATGATGCCCTTAAAGAGGA
AGCCAGTCCTGTTTCCTCTAACCAGCAACGTGGGCAGCACAGTGAAGGGTGGACAAAACCTCGAC
TGCTGCGTCTACCAAGTACGATGTCTTCAGACAACTTTCTCTGGAAGGGTCTGGACTAGGTGT
TGAAGACCTGAAAGATAACACTCCTTCAGGAAAAAGTGATGATGATTTTGCTGACTTCCACTC
CAGTAAATTTTCTTCCATAAACTCGGACAAATCCCTGGGAGAGAAAGCAGTGGCTTTCAGACA
CACCAAAGAAGACTCTGCATCAGTGAAGTCCTTAGATCTCCCTTCCATTGGTGGCAGCAGTGT
TGGCAAGGAGGACTCTGAAGATGCACTCTCTGTTCAGTTTGACATGAAATTGGCTGATGTGGG
AGGAGCGGCCGC

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FIGURE 493

GCCCTATCCAGGTTACCCTTCCNAAGGGAAACCAGGTTTCTTTAAAAAATTAAGCAGCCCGGG
GCCGGTGGGCTCACGCTTGTAATCCNAGCCTTTGAAGCCCGAGGCGGCGGATCACCTAGAAGA
TGACTCAAGACCGGCCTCTGCTTGCCGTGCAGGAGGCGTNAAGAAGTGCTTCCCCGTGGTGGA
GANCAGCAGGGCCTGTGCAGAGTGCCCTGCGGGACTGCCAGCCCCTCCTGTCCTCCCTCAGCA
ACCTGGCGGAACAGCTGCAGGCCGCACAGAACCTGCGGTTTGAGGATGTGCCGGCGCTTCGGG
CCTTCCCAGATTTAAAAGAGCGGNTGAGGCGTAAGCAGCTGGTGGCTGGTGACATCGTCCTGG
ACAAGCTAGGGGAAAGGCTAGCCATCCTCCTCAAGGTGCGAGACATGGTCAGCAGCCATGTGG
AGCGAGTGTTTCAGATCTATGAGCAACACGCAGACACAGTTGGCATTGATGCTGTCCTGCAGC
CTTCAGCAGTGAGCCCCTCTGTGGCTGACATGTTGGAATGGTTGCTGGATATTGAGAGACGGG
CGGCCGC

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FIGURE 494

CAGCATGAGACATCCCCCATGCCTGGGGCCATTNAGATNTTTTTGGAGCACCAGTCACTCCC
AGGTTTTTATTTTAGGGGTCATCGATTTTACCTACTTTGTCAGACTGGTANAAGTTGCTTTGC
ATATCANAAAACTCCATTTTTTCCACAAAAGGGATTACAGAAAACCTCTTTGTGAGTGAGT
GATTGGAACCTAGAGACTCCTGTTGCCAGAATCAGACTGCCCTAGAACAGAATGGACAATGCA
GGGAGGAGAATTACACAAACAGCACCTGTTNTGAGGCCTGTGCCAGCCCACCAGGCCTGCTC
AAATGTGGTCTTTACTTCAAGTGCACAGAGGCACATGAGGTTTNTGGTGATAAACCAGCGTCT
TACCGCTGTTTTAAAGTCCCATCCCCATGGCTTTCACAATCAGTTCCGTTTTTTTTGCTGTAC
TTGATAAAATGTTTATTCTCATACAGGTCAAGTACATTTACTTCTATTACAGTGAGTACCCA
ATAACAACAAAAGCGCTTACAAATTTGGGGGGGGCGGCCGC

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FIGURE 495

TTTTTTAAAAAAAAAAAAATCTCAGTATAGTTCTGATTAAAATTTCTTTCTGAGTCCTAAA
TGCTTTAAATCTTCTTTTCCCATTCCTTTTACTTCTCCTATCCATAGTTACAAGTTCTTACGC
ATGACATATCTCTTGGCTGATAAGTTTAACTGCTTAAGCACCTGTTTATGTTTCATTTTAAAC
ATAGCCAGTTACTATTATGCTTGGATATACACAATGAGGGGAGCGGCCGC

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FIGURE 496

TGTGGAAAAACAGTTATTGCANCGGTTGCTTANAAAAACATAAAAAATGCATCCATGGGGCTT
ATTTATTCAGGAGAAATCTCANAGCNCCTGGGAGTGCTTTANAGNCAGGGGNTGCTTGCATCC
TCTGTGGATGTGTGTGTGTGTGTTTGTGCCTAGGTGTGTGCGCACAGGTTTGTGTGCCTGTGT
GTGCATGTGTGTGGGGTGTGTGTGCATGTGTGTATGCACGTACCCGTGTGTGTGTGCACAGGT
GTGTGTGTGTGTGTGTTTGTGTGCCTGTGTGTGGGGTGTGTGTGCATGTATGCACGTACCAGT
GTGTGTGTGCGCAGGTGTTTGCCTGCACAAATATGCATCTGTGTGTATGTGTGTGTGTTTACA
CGTGTGTGTGTATGTGGCGGCCGC

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FIGURE 497

CATTATAATTAAGTATAGTTACTATGCTGTATATTTGATCACCCAGACCCATCTTATAACTGA
AAGTTTGTATCCTTTGATCCAAATCCCCACATTTTTTCCCAGCCACTGACAACCACCACTTTAC
TCTGTTTCTATGAGTTCAACTGCTTTAGACTCCACATGTAAGTGAGATCATACAGTATTTTC
TTTCTGCACTGGCTTATTTCACTTAACATAACATCCTCTAGGTTTCATCTATGTTTCAGCGAAT
GGCAGAATTTTCTTCTTTTTAAAGGCTGAATAGTGTTCCCTCAGGTATATATACCAGATACAC
ATACATAAGGGAATATGTGTGTGTCTCGGGTACATGTACATAAGGGAATACTATTTTTTACTC
ATTCATGTATGTGTACCAGATACATATACATAAGGGAATATATGTATATGTGTCTGGTACATA
TACATGAAGGAATGCTATTTTTTACTCATTTCATCTCTCAGTGGACACTTAGGTTGTTTTCATA
TCTTGGCTATTATGAATAGTGCTGCAATAAATATGGGAGTGGCGGCCGC

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FIGURE 498

TTATTGGGAGATATCCATGTTTTTCATAAAATCAACAAGAGAATCCNTGATTGTTTCAGAAGAA
AACAAATTNTGACCGNAGAATGCTGTTACNTGAACCCCTTATTTTGAAGNATCATAAGATTCAC
AGGGGTGTTTGCATTTGGACTTTTTGCTACTGACATTTTGTAAACGCCGGACAAGTGGTCAC
TGGGCACTTAACGCCATACTTCCTGACTGTGTGCAAGCCAACTACACCAGTGCAGACTGCCA
AGCGCACCACCAGTTTATAAACAATGGGAACATTTGTACTGGGGACCTGGAAGTGATAGAAAA
GGCTCGGAGATCCTTTCCTCCAAACACGCTGCTCTGAGCATTTACTCCGCCTTATATGCCAC
GATGTATATTACAAGCACAATCAAGACGAAGAGCAGTCGACTGGCCAAGCCGGTGCTGTGCCT
CGGAACCTCTCTGCACAGCCTTCCTGACAGGCCTCAACCGGGTCTCTGAGTATCGGAACCACTG
CTCGGACGTGATTGCTGGTTTCATCCTGGGCACTGCAGTGGCCCTGTTTCTGGGAATGTGTGT
GGCGGCCGC

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FIGURE 499

AAAAAAAAAAAAAAAAAGCTAAAAAACCTTGACTAAATCTACCATGTTTTCTCATATTATTAA
AAATTCTAAACGTGGGTTTTTTTGTTTTGTTTTGTTTTTCTGTTCTCCCTCTGCAGAGTTGT
TAGCGGTTCTCGAGATGCCACTCTTAGGGTTTGGGATATTGAGACAGGCCAGTGTTTACATGT
TTTGATGGGTCATGTTGCAGCAGTCCGCTGTGTTCAATATGATGGCAGGAGGGTTGTTAGTGG
AGCATATGATTTTATGGTAAAGGTGTGGGATCCAGAGACTGAAACCTGTCTACACACGTTGCA
GGGGCAGGCGGCCGC

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FIGURE 500

ATCAATGGCCACCCAGCAAGACCAAGTTACAAGGATCGTATNTTGGTCCGAAGGGATGAAAGT
GGCCCAAGGGTCTCCNTTNTCGGTGAACGTTTCAGCTGNTGCAGGACCACGGGGAAATTGCCAA
GAGTAAGCATCTCCAGGGGGAGATGACCTAACGTTTCCAAAAGAGAAACAGGCAGCAGGTTCT
TAAGCAGTGAAGATGCGGACGAGATGTTGCATGTGGCTCCTGAGGCACAGCAGTGACTTCGTG
CCCAGAGCCTGGCAGAGAGGTTCGCAGGTGTGCCAGCTTCCCTGCCAGTCAGGGCAGCCTTGGG
TGTGTGTGCAAGCATGTGTGCACATATTGTGTGATGTGCGTGCTCCTGTATGTGTGTGCATAT
GTGTGTATGCCTTGCACAGGTGTGCACAGGTCTGAATGTGTATACGTGGGGGGGGCGGCCGC

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FIGURE 501

GAATATCCTGCAGGTATCTCTCCGGCCACNTCCTTGCCTACTGAGCNTCAGCCCTGATTTGT
CATCGTCGGTTTCGTGACCCTCATCATATTTAAGCGGGAGCTGCACACGGCCCCCACACAGCA
GTGGGCACCAAGTACGGGATGCCCTCCAGCCATTCCCAGTTTATGTGGTTCTTCTCCGTCTAT
TCCTTCCTTTTCCTGTATTTAAGAATGCACCAAACAAACAACGCCAGGTTCTTGACTTGCTG
TGGAGGCACGTGCTCTCCCTGGGACTCCTCGCTGTGGCCTTCCTAGTCTCCTACAGCAGGGTC
TACCTGCTGTACCACACCTGGAGCCAGGTGCTCTATGGAGGCATCGCTGGAGGCCTCATGGCC
ATCGCCTGGTTCATCTTCACCCAGGAGGTCCTCACCCCGCTGTTCCCCAGGATAGCAGCCTGG
CCTGTCTCCGAGTTCTTCCTAATCCGAGACACAAGCCTCATTCCCAACGTACTCTGGTTTGAG
TACACGGTAACCCGGGCAGAAGCCAGGAACAGACAACGCAAGCTGGGGCCAGCGGCCGC

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FIGURE 502

CCCTGCCCAAAGTTAAGTTCAAGTTTTCTTTTCAGATAATGCCTGAAATTGCCCAGAATAGTC
AGAGGATTTAAAAATTTNTTTGACCACAAATGCACTAAAGTTTAAAGTAAAGCAGTTTCTTCN
TTCATTAGCATGTGTTTTACACTAACATTTAATAAGAAGCCATTTTTAGTCTTGATCTTGGCA
GTGTTTTCTTTAAGACTTCTGATGTTATCAAGTATTTCAATTAAATATTAAATTATTATTAATT
ACTGTTAGTTTAAATATCATTAGGGGTTTCAATTTGGCTTCTTAAATGGACTGAACTGTGGC
ATCACGTATTTTGTCTCATTCATGTATGAATAAAGCATAAATCAGTTTGTTAATGGATGCTCA
TACCACTGTTTATTTTTTCAAATATTTTAACACACTTTCCAAATGGTGGGATTGCTTTATAA
ATACAGTTTTCTACTTACACATGAGGAAAATAATATTATTTGCATTATGGATGTACACTTTGA
AAAACTTTTCAATGCAATTATCTGTGTATTTACAATCTCTGGTACTTTTCTCAGATTTAATT
TTGGTGGGGCGGCCGC

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FIGURE 503

AAGCCTGTGTAAATGGATCAACCAATCCCAGTACATTTGCTTCAAGATTCAAACACATTCAGG
TGGGGGCTTGGGACGGGATCAGCATTTCATCATGGGGAAGAAAACCACAGGCCATCAGTGGATC
ATACACAGTGCTCATCAAGAAAGATAACGTTACTTTTAAATTGTGGGCTCAAACCTGGACAGCA
AGGTGCACAGTGGAAGAGAGCAGAAGTGTTTTTAGGCATTCGTTACATACACAGATTGTCTT
CAGAGCCAAACGTGGTATCAGTTACATAGGAGATGTAGCAGTGGATGATATTTCTTCCAAGA
TTGCTCCCCTTTGCTTAGCCCAGAGAGAAAGTGTAAGTGTGCTCATGAATTCATGTGTGCTAATAA
GCACTGCGTTGCCAAAGACAAGCTGTGTGATTTTGTGAATGATTGTGCTGATAATTCAGATGA
GACTACTTTCATTTGCCG

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FIGURE 504

AAAAAAAAAAAAAAAAAACCTGCCAATTTTCAAACATACCGTAGAGATTATTTTCAGGTG
CCATTTTATAGTATAGCAGCAGGGCTTTTACTCTGTGTATGCACAGATGCAGTCTGGGGCATG
GTTTGTGTGCTGGACTTTCTCATGGCCATCATCAGTATGCTTATGGATTTGATGACAGGCATA
GCCTGGGCATATCACCTCATTGGTAAAGG

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FIGURE 505

TTTAAGTGCAAAAAATTATTTTATTTTTTTTCCCAGTAATTTTAAATTGGAATTCCAGCCNTGG
CTTATTTTTTGGGAGACCCAGCCATNTACCAAAGCTGAAGGCACAAATGCTTATTCTCGTCACT
GTCCTTTTTTATGTCAGCATTTCAGAGTTACTGGCTGTCATTTTTCATGGGATGATTTTATTGT
AGCTTTCATAACCTGTTGGAAGAAGTTACTACTTTGGACAGGCTATCAGGATAACTTCCTATA
TGAATGAAACTCTCTTATATTTTCCTTTTTTCATCCCACTCCAGTTATACTGTGAGATCTAAAA
AAATATTCTTATCCAAGCTCATTGTCTGTTTTCTCAGTACCTGGTTACCATTTGTACTACTTC
AGGTAATCATTGTTTTACTTAAAGTTCAGATTCCAGCATATATTGAGATGAATATTCCCTGGT
TATACTTTGTCAATAGTTTTCTCATTGCTACAGTGTATTGGTTTAATTGTCACAAGCTTAATT
TAAAAGACATTGGATTACCTTTGGATCCATTTGTCAACTGGAAGTGCTGCTTCATTCC

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FIGURE 506

TTTTTTTTTGACACGAGACATAAAAACTTTTAATGAAGGAGGACACAGNTCAGAGCCTTCCAC
AATGGGGCCAACNTGCCCCACGGAGACCGGCCATGGCAACCGCTCAATCAGAAGGTGTTNTT
GATGCGGCCGGCCACCAGCCTAAGGATGTCCCCGATCTTNTTCTGCCAGTTGGCGATGTCCTT
GGACACGGCGCACCCACAGCTCCCCATGCCGAGGCTNTGCACTCTCACAGCGCTTCCTCACCTC
CTCCTGNTGCTCCTCAGTGCCATGCTGCAGCTCAAACCTTGTAGAAGAAGGCCCAGGCATCCCC
CAGGTCCGAGTCAATCTTCACAGTGCGGTGGAACCACTCCCTGGCCTTGGTGATCTTCGCTG
ACTCCAAAACAGCTTGGCCACGGCCAGGAGCACATGGGGGTCATGCTCACACTTCTTCAGGGC
ATCCACGCTCTTGGTCCTCCTCTGGGGCCTTGCCTCGAGGAAGA

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FIGURE 507

ACCCTGTTTTTTAAGCACACCTCAAGCGGGGCCTCGCTTACCAATANTTGATTAACCACAAGN
AAAAGTGTCAAGCTCAAGACGTCCTCCTTTTACTGTTTGTA AAACTGTCCTGAAA ACTATGAT
CGACGTTCCGGAATTAGAAGGACGTGGGGCAATGAAAATTATGTTTCGGTCTCAGCTGAATGCC
AACATCAAACTCTGTTTGCCTTAGGAACTCCTAATCCACTGGAGGGAGAAGAACTACAAAGA
AACTGGCTTGGGAAGATCAAAGGTACAATGATATAATTCAGCAAGACTTTGTTGATTCTTTC
TACAATCTTACTCTGAAATTACTTATGCAGTTCAGTTGGGCAAATACCTATTGTCCACATGCC
AAATTTCTTATGACTGCTGATGATGACATATTTATTACATGCCAAATCTGATTGAGTACCTT
CAAAGTTTAGAACAAATTGGTGTTCAAGACTTTTGGATTGGTCGTGTTTCATCGTGGTGCCCC

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FIGURE 508

TCGACCCACGGGGTCCGGTAAAGTTGATGGTCTGCCTTGTACATCTCAACCATTCTTGAACCA
CTTAATCCTNTTTTTGNCAACACTAGTAGAACAGAATCCTGAAGATATGGAGACCTATACCTA
GATGTTGCTGAAGCTTTTNTGGATGTTGGTGAATATAATTCTGCACTTCCCCTCCTCAGTGCT
CTTTGTTTGCTCTGAAAGATACAACCTTGCAGTAGTTTGGCTTCGTCATGCAGAATGTTTAA
GGCCTTAGGCTATATGGAGCGAGCTGCTGAAAGCTATGGCAAGGTGGTTGATCTGGCCCCACT
CCATTTGGATGCAAGGATTTCACTTTNTACCCTTCAGCAGCAGCTGGGCCAGCCTGAGAAAGC
TCTGGAAGCTCTGGAACCAATGTATGATCCAGATACTTTAGCACAGGATGCAAATGCTGCACA
GCAGGAAGTGAAGTTATTGCTTCATCGTTCTACTCTGTTGTTTTACAAGGCAAAATGTATGG
TTATGTGGATACCTTACTTACTATGTTAGCCATGCTTTTAAAGGTAGCAATGAATCGAGC

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FIGURE 509

ACAGTATGGTCATTCATGCTCCAAAGAAAAGGAGATTGAGCTTTAAATNAAATNTCTCACAAG
TTAGGTGATCCAGGTTTTGTGGTCTTTGCAACCCTTGTGGTCATTGNGCCCTTGATATTAATC
TTCGGGGGGGTCCTCGCCATGGACAGACAAACATTNTTGTGACATAACAATCTGCTCTGTAAT
CGGGGCGTTTTCAGTCTCCTGTGTGAAGGGCNTGGGCATTGCTATCAAGGAGCTGTTTGCAGG
AAAGCCTGTGNTGCGGCATCCCNTGGTTGGATTCTGTTGNTGAGCCTCATCGTCTGTGTGAGC
ACACAGATTAATTACCTAAATAGGGCCCTGGATATATTCAACACTTCCATTGTGACTCCAATA
TATTATGTATTCTTTACAACATCAGTTTTAACTTGTTTCAGCTATTCTTTTTAAGGAGTGGCAA
GATATGCCTGTTGACGATGTCATTGGTACTTTGAGTGGCTTCTTTACAATCATTGTGGGGATA
TTCTTGTTGCATGCCTTTAAA

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FIGURE 510

TTGCTTGTTAAGCTAACAGGGGTGCAAGCTTCCATTTTGGATCTANTTTTAAATACACTCAGA
CAGGAGAAATTTGGANTAATTTTCAAACACAGACACTTTNTAATCATGATGCATTTCAAAAG
TGGACTCGAATTAACTTGAGTTGCAAAACATGACAGTGCCCGAGGATGATAACATTAGCAATG
ACTCCAATGATTTACCGAAGTAGAAAATGGTCAGATAAATAGCAAGTTTATTTCTGATCGTG
AAAGTAGAAGAAGTCTCACAAACAGCCATTTGGAAAAAAGAAGTGTGATGAGTATATTCCAG
GTCCAACCTCCTTAGGCATGTCTGTTTTTAACCTAAGCAACGCCATTATGGGCAGTGGGATTT
TGGGACTCGCCTTTGCCCTGGCAAACACTGGAATCCTACTTTTTCTGGTACTTTTGACTTCAG
TGACATTGCTGTCTATATATTCAATAAACCTCCTATTGATCTGTTCAAAGAAACAGGCTGCA
TGGTGTATGAAAAGCTGGGGGAACAAGTCTTTGGCACACAGGGAAGTTTCGTAATCTTTGG

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FIGURE 511

AGTGGGCTTGAAC TTCGTGAGTTTCGCTTTAAACTGCCCTTGAAATGAAGTGGACTTGGAGGG
GCATGGAATATTCACATGGNAGAGCCGCATGAGGCCGCCACCACGCTTCNTGAAGGATGCCC
GTGGGAAGAATTTTGACGTGCCAGTGTCTCGTTCTACAGGGTGTTCCATTCTTCCGCAATCT
CAGAAAAATGGGACTAAAAGAACTTATTTTGTAATAAAGAAGACTTCCATTTTAAATGACC
AACATGTATTAAGATGGACACCTACTCTACGAAACACGAAGTTCTATGGTCTCGAAGAAGCCC
GTGCCTGTTTGAAACTGATCCTAACTAAAAACAGACTTGAGTGGATATGAGAATGTTGGTTAG
TGGCAGAAGAGTCAAAAAATGGCAGTTAATTATTCAGTTATTGCTACTTGTTTTTTAGCGAG
CCTCATGTTTTTTTGGGAACCAATCGATAATCACATTGTGAGCCATATGAAGTCATATTCTTA
CAGATACCTCATAAATAGCTATGACTTTGTGAATGATACCCTGTCTCTTAAGCA

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FIGURE 512

TCCGGAACAATTATAATAAAGCCANCTTTAACCCATTGAGAGCATAAGGATGNTGCAAAGGCN
CAGTGCTGGATGGANAGGACAGTGCCTGGGGCAGTCATGGAAGACTTNTTTAGGAGGTGACTT
TTTAAGGGGTTTTGTGATCAAAANTATGGAGTCTTAAGTCCAACCAGTGGTTATGAATTCGG
TTCTGCCACTTGCTATAATAGCTGTATCACCATGAGCGATAACTTAACCTCTTTGTGCCTCAG
TTTCTTCATATATAAAATGGGGATCATGATAGCTCTGTCCCAGGGGAGTTAGGAGGATTAAAT
GCAACAGTAATCCAACCCACAGTATGAAAAGACAGGCTAGCACATACAACACAATCTATAAAT
GTTTGCTATTATTGTCATCCTTTTTATTAGTATATCATGGTACAAGTTTGCTGGGTAGAAAGA
TGGCGATGGGGAAGGGGACATTCAGGCCAATGTGATAATAAAATCAACAGACAAAAGAAGGG
AGAGTGTGGTGAGTAGGATAAAGCTCTGTACAGATGCAAG

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FIGURE 513

ATTTAAC TTTCCCCTTTAAAAGGAATTGGCTATAGAACTGCTTTGTAAAGATGCTTCTTGATA
TTTACTTTTG TTCCTTTTCCCTAATCATTCCCTTTTTTCCCCACTCCTCCAGAA

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FIGURE 514

TCCCGTGGGGGACTTGGGATCCCAGACGTTAAANTAGGAGCCGGAAGAGGGAGGNTTTNTTC
TTGCCTGGAAGTTGCCTGNGTNTTTGTACCACCCCAGCCCCCCCACCGTGGNNGGACCNTCGG
CAGTGACGGCCCACAGTGCCACGTGNTCCCAGAACCCAGAGGGAAAGCATCACGGTTCNTNGT
TGACAGCTCCCAGTCACACAATCCCCACGTGTCCTGTCATTCCTAAACAAGGTTTCATCACC
AGATTTAGACCCACCTGCTTTTCTCTCTTTTCTGCTTCTTCCAGAGATTTTTTTTAGTGTCTTC
ATTTCACTGGTTACCACTTCTATCATGTTTCTGGCCCTTTCTTTATTCTCCTTAGCCTCATGT
TCTGTGGTATCCAGTTCTGACTTGACAGACATGAGCTTTTTCTCAGCTTCTCCTTCATCTTC
TCCAGTTGGTCTCTGGATTTGTTTAGATCTTCAATGGCTTTAGTCTGTTCCAAAGTTTAAATC
TTCAGTTCATTGGTGTCGGCCAGTTTGGCTTTGAGCTCGGTGTGCAAGTCTCG

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FIGURE 515

TCAGCCTTTCTATGGAAACAACCTTTGAGGATGAGCCNCCTTTATTAAAAAGTTAGGTATCAA
TTTTGACCNCATCTGGCAAAAACACTAACAGTATTACATCCGTTAAAAGTAGCAGATGGCAG
CATCATGAATGAACTGATTTGGCAGGTCCAATGGTTTTTTGCCTTGCTTTTGGANCCACATT
GCTACTGGCTGGCAAAATCCAGTTTGGCTATGTATACGGGATCAGTGCAATTGGATGTCTAGG
AATGTTTTGTTTATTAACTTAATGAGTATGACAGGTGTTTCATTTGGTTGTGTGGCAAGTGT
CCTTGGATATTGTCTTCTGCCCATGGCGGCCGC

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FIGURE 516

TTCATGGGAGGACATGGAGATCATGGGAAGCATATCTATGACTATAACCTAAAGCTGAAGCCG
TGTGATGGCCCAGTCTTGATTANTGAGCCAGCGCTGAACCCACTGGCCAACCGGCAACAGATC
ACGGAAATGTTTTTTGAGCATCTGGGTGTTCCCTGCCTTCTATATGTCCATCCAGGCTGTGCTG
GCTCTCTTTGCTGCTGGCTTCACTACTGGCCTTGTGCTGAATTCAGGTGCTGGGGTTACCCAG
AGTGTGCCCATCTTTGAGGGTTACTGTCTGCCTCATGGTGTGCAGCAACTGGATNTGGCAGGC
CTTGACCTCACCAACTACCTCATGGTGCTAATGAAGAACCATGGTATCATGTTGCTCAGTGCT
TCAGACAGAAAGATTGTTGAAGACATCAAGGAGAGCTTTTGTTATGTGGC

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FIGURE 517

ATATGTGAAATATTGGCAGTCGAACATGAACAACGGTCAAGATGTTCCAGGCACATAAGAGGC
GATTAGAGAGGCCAGGTTTATACACAATATAACCAATTTCTGTAGTCCCTATTGTCATGGTTAA
ATTATTCTCTAAGTGTATTCTGGGTGCANAGANGCATGGGCTCTGTCAGTTTCTGGGAAACTT
TNTGCACCCTATAAACACAATATTTTTCTTTGTTTTCACACATTCACCATTTTGCTGGCACCT
TTNTGAAGTAGTGTTGTCCCGGTATCAGCCTTTGCAATATGTTANAGATGTACTGTCTGCCGC
ATTTTGCACTGGTTTTCTCTTTTCATTTATGATTAATAATGTGTATACGTTATTCCTTTTTAT
TATCTACTGTGTAAG

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FIGURE 518

CCCCCGCACCGATTTTTCAAAAATAATTTTCTAATTAAGATATGTGTATATGTTTTAACA
TCTTTCAGAAACATAAAATTGAATGAAAAGAGTAATTTGCAGAAACACATGCAATATAATTTA
TTGTGCATTTTAAACACACAAAGCAGGACTACATGATGTTTCATGTGTGCGTGTGTATATATA
TATATATTTAAACACACAGACAGGCCGGGCATGATGGCTCACGCCTGTAATCCCAG

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FIGURE 519

GACCACTGGCCCACCCGCCAAGGATTGCCTAGATGATAATTTACAAGNACCACNACTTTAGAT
TTNCCTTATTGATGTTAAGATACCAAACCAAGTAAGTATTAAAATCAGCCAAACCTTGGACAT
TNTGGGAATATATAATCATTGATAATGCATAAGAATAGGAAAAAATTGAATGTGTTTATGAC
TAAAGTTTTATATTTGTGGTAATGTTAAAATGTATTATTAAATATGTTAAAATTATTTCAATTT
TTTTCCCCTTTGAGAGGTAAAGCCTAATACTTCTCCCCTTGAATATGGGCTAGACTTATGAGC
ACATTTCTAATGAACAGAGAAAGTGGATGTGGATGTGACAATGTGTATGTTGGAAGACTAGAC
AATATCAGAGATGAACATGATGGTGAAAGAAAATAAAAGAAGAAAGCTAGTTAATAAAAGGCA
CCATTGTTTCCTCCTCCTCCTCCTCCACCTCTTTAACTCTCTCTCCCTCTCTCTGATCAA
CAGCTCTAGCAAAAGCCAGATGCTATGCGGTGCGGACTTTCAGGCAGCTTTGCAGGGAGATAC
ATGTGGCAAGGAACTGAC

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FIGURE 520

TGGCTTGTAGCCCCATCCAAATAACAGCGGGGAGGAGCGGAGCCTGTGGTACGCAACCCATTA
CCCCNNTGATGAGAGAAAACCTTTTATCCATGACCCAGGATGACTACAAACCATCTGATGGCCT
GCTGGTGA CTGTGAACGGCAACCCCGTGGATTACCACACCATCCACCCAAGCCTGCCCATGGA
GAACGGCCCTGGCAAAGCCGACCTNTACTCCACCCCTCAGTACCGGTGGGAGCCCTCTGATGA
ATCCTCAGAAAAGCGAGAGGAGGAAGAGGAAGAGAAAGAAGAATTTGAAGAAGAAAGGAGCCG
TGAGGAAAAAAGAAGTATCAAAGTTCATGCCATGGTCTCCGTATTCCAATTTATTATGAAACA
AAGTTACATCTGTGCCCTCATAGCTATGATGGCCTGGAGCATCACCTATCACAGCTGGCTGAC
CTTCGTGCTGCTGATCTGGTCGTGCACTCTTTG

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FIGURE 521

GAATTTTTTCGAAAAGCTAATGCCCCATTTTGGATGTCATTTACCATTACCTTTTAATATTN
GGGGGCATTTTGGGATCAAATTATCCTGATGTTTTCAACAAAGACTTGAGANAAAATAAGGN
GCATTACTTTTTTTGGACATTNTTCTTTTAGACCTATTGTGAGGTGTTTGCCCNCCATTAGAA
ATTNCCCCAAATGGTTGAAAATTNTTAAACAGNAGAAGGAAGAGACTCAAAGTTAGCATCACA
AAGAGAAACNCGATGCTGGAAAGGGAGATTGCATTCTCAATCCGGGATAATTTTCATGCAGCAG
AAGGCTTTCAGTACATGTCAGTGATTCAGGCTTTTCTCGGTTCTGTTCCACAATTAATTTTG
CAGATGTATATCAGTCTCACTATACGAGAATGGCCTTTGAATAGAGCATTGCTGATGACATTT
TCCCTGTTATCAGTTACTTATGGGGCCATTCGCTGCAATATACTGGCCATCCAGATCAGCAAT
GATGATACTACCATTAAGCTACCGCCGATAGAATTCTTCTGTGTCGTGATGTGGCGTTTTTTG
GAGGTTATCTCACGTGTAGTGACTCTGGCATTGTTTCATTGCATCTCTGAACTGAAGAG

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FIGURE 522

AAATGTTTTGACAAATCACAAAGAAAGTTTCAAAAATTTGGGNNTATTAGTTTGAAAAATTGTT
TTCAGTTCACTTGTGATTTCTTGTTTAATTCACCTGCNGANAGGATTCTTTTANACTTTCCAAG
GATCTTAAAGCTATCNTACCTAGGAATGAGAATTATGGTGTTCATGACAACTTTGAATAAGT
ATTCCCTAAAGCTAAGAGGAAATTCTNNCAATAATGANTCGGGNCATTGCTATTTTGGGAAAG
TAAAAGCGGAAAAAGCTTGACGACACTGAAAGGCTTGTTGAGATGGAACAAGTCCTCTCTTCA
CTTAACAAGATGAGAAAGACAATAGGTGGTGTGGCTCTCTGGCGACAGCAAATCTGCGCAATT
GCAAGGGTTCGCTTGTTAAAGTTAAAGCATGAAAGAAAAGCTCTTTTAGCACTGCTATTAATT
CTAATGGCTGGATTTTGCCCTCTTCTTGTGGAGTATACCATGGTGAAAATATATCAAAACAGT
TACACCTGGGAACTTTCTCCTCATTTGTATTTCTTGCTCCTGGACAACAACCACATGACCC

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FIGURE 523

CCTTATTGATGTTAAGAAACCAAANCAAGGTATGATTAAAAATCAGCCAAACCTTTGGACATT
CTGNGAATATATAAATCATTTGATAATGCATAAGATAGGAAAAATTGAAATGTGTTTATGACT
AAAGTTTTATATTTGTGGTAATGTTAAAAATGTATTATTAAATATGTTAAAATTATTTCATTTT
TTCCCCCTTTGAGAGGTAAAGCCTAATACTTCTCCCCTTGAATATGGGCTAGACTTATGAGCA
CATTTCTAATGAACAGAGAAAGTGGATGTGGATGTGACAATGTGTATGTTGGAAGACTAGACA
ATATCAGAGATGAACATGATGGTGAAAGAAAATAAAAGAAGAAAGCTAGTTAATAAAAGGCAC
CATTGTTTCCTCCTCTTCCTCCTCCTCCACCTCTTTAACTCTCTCTCCCTCTCTCTGATCAAC
AGCTCTAGCAAAAGCCAGCTGCTATGCGGTGCGGACTTTCAGGCAGCTTTGCAGGGAGATAC

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FIGURE 524

GAGGGTAGGATCCGCAAGCCCCCTTCGCGAAGCCCGAGNGAGNCCCGGGCGACAGGCAGGCAG
AGAAATATGTTATTCCCATCCTTTGGCCCAACANATTTATGGCAGAGATGGTGGATTTCTTTAT
TCTCTTCTTTATAAAAGCAACCATTGTCTTAAGCATTATGCACCTCAGTGGGATAAAGGATAT
CTCTAAGTTTGCTATGCATTATATAATAGAAGAAATAGATGAAGACACATCAATGGAAGACTT
GCAGAAAATGATGGTTGTGGCACTTATATACAGATTATTAGTTTGTCTATGAGATAATTTG
CATTTGGGGAGCAGGTGGAGCTACCCANGGAAGTTCCTGCTGGGGCTTCGAGTTGTGACATG
TGATACATCAGTGCTTATTGCACCAAGTCGGGTTTTAGTNATTCCTTCCTCAAATGTTAGCAT
TACAAC

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FIGURE 525

CAAGATAAAATATATGGGGGAAGATGTAGAAATGTGACAGTTTGGCAAAAACAAAGTTCTCCC
AAGATTTTCAGCACGTTTGCAGCGGAAATTCAGGAAACCATCNCAGCACTCAGAGAGCAGATAA
ACAAGCTGGAGGCACGCCTGAGGCAGGCAGGGTGTACAGATGTTAGAGGGGTCCAAGGAAGG
CCGAGGAGCGCTGGATGAAAGAAGACTGCACTCACTGCATTTGTGAGAGTGGCCAGGTCACCT
GTGTGGTGGAGATTTGTCCCCCGGCTCCCTGTCCCAGTCCTGAATTGGTGAAAGGAACCTGCT
GTCCAGTTTGCAGAGACCGAGGAATGCCAAGTGATTCCCAGAGAAGCGCTAATAAAAGTTTT
GTGCTGTTGAGCCCCAAATGGGAAATTTCTCAGGAAGAGACATTTAGGACTTCAGAACTTTTA
ACTTGTAGTCACATTGTTGATATGGAAACCACTGACTTAAGCAACTTAGTTCATCTAATCTTA
CATATACTTACGATCTTTTATTTTTTTCATTTTCTA

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FIGURE 526

GAAGTGAGGAGAAAGTTTATNTTTTTTCATATAATTTAAGGGTCGTTTCTGTGAACCATTGCTT
CATGTCTTTTTCACTTTTTTCAATTGTCTCATTTTCCTCAAAATANAGGCACTGTTTATGTAT
TACAGAGATTAGGCCTTTGTCATTAGTCTTTTCCTGTGAACGAGATCACATAGATTATTTGTT
TCTTTTCTGGCTTTTGAATTTCAGCCATCATTTTAAAAAATACTTCCCCATGGTTTTTGTCCA
GTTCTTTTGTAAC TTCTTGTTCTCCATTTCAATATTGGATGTTTGGCTTTTGTTCCTTTGCGT
GTTTGGTATGCGATATGGATCCCCCTTAGTCTTTTTGTCTAGCATCAATATATTTATTTTAT
ACTGTCCTTCAGATTGATGATGATTTCCAGAGTTCTTGGGGCTTTAATGCCTGTTGCGTTTAC
AGACTCTCATCCGGG

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FIGURE 527

CTTGTGTTTTCTTCCCCTCCCTAAATTTGAAGAACTATGGAGAAAATGGTACTTGATGACAGT
AGTGGTTTTAATAGGACTAACAGTACGATGGCAGTGTCTCTTAATTCTTATTCAGGTGCTGGT
AACCCGCCTATGTTTGGTGATTATGAAGCTCAGAGACACTGGCAAGAAATAACTTTTAATTTA
CCGGTCAAACAATGGTATTTTAACAGCAGTGATAACAATTTACAGTATTGGGGATTGGATTAC
CCACCTCTTACAGCTTATCATAGTCTCCTATGTGCATATGTGGCAAAGTTTATAAATCCAGAC
TGGATTGCTCTCCATACATCACGTGGATATGAGAGTCAGGCACATAAGCTCTTCATGCGTACA
ACAGTTTTAATTGCTGATCTGCTGATTTACATACCTGCAGTGGTTTTGTACTGTTGTTGCTTA
AAAGAAATCTCAACTAAGAAAAAGATTGCTAATGCATTATGCATCTTGCTGTATCCAGG

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FIGURE 528

CCAGAATGAAAAAAAAAAGTCTTGTTGGATAATAGTGTTTGACTAGCGTTTTAAGAACTTGAG
AGTAAAAGCACCAATAAGATTTTTTCACTTTTCTGCTTCCACCCCCAACTGAGAACATCC
ACTCAATTGTTTGGGAAGAACTGTAGGTCTATATAAATTTTATTTATAATGTATGTGTAATAT
ACATAATCATAATACAGTTCTCAGATGCAGGGAAGAAGTTTGGCATTTAATCATTGAGGCTTT
AGGTTTTTGGATGTGATCAGACTGGGCCATGTCAAACCCGGAATTTTCACCAACAGTTCACTCA
CCCTCCTGGTACATTGCCATTCCAAGGAATTCTGAGAGTAGGCAAACAAATTTTGCCTTCATG
GTACAGTTCTCAGTTTTTCTTATAGGAGAAATATGGTATATGTTTATAAGAATCTTTTATGAG
ATTATAGATTTCAATGCTGTGGATAGTGTCTTGCACCCAAACAAGAAAGTCCATAATGGAATG
ATCTTCCC

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FIGURE 529

TCCAAGTCCTTGAACATCTTTGGTTTTTTTTGGAGTGTCCAAACCCATGTTTCAGAAACGGCACA
TGGAATACTCATGTAATGNAGGAAAAGTCTATATCTGCAGCTGGACCCAGCCATACCAGGAGT
GATTTTGGAAATCCATACCCGTTTGGGATTGATCCGATTTGGAAC TTGGCTTCAAACAAACTC
ACATTTNTGAACTCGTATAAAATGAAGATGTCGGTGATCCTGGGAATTGTCCAGATGGTTTTTT
GGTGTCA TCCTCAGCCTTTTCAATCACATATACTTCAGAAGAACTCTCAACATCATTCTGCAA
TTTATCCCTGAGATGATTTTTATCCTGTGTCTGTTTGGATACCTGGTTTTTCATGATCATT TTC
AAATGGTGCTGCTTTGACGTCCACGTATCTCAGCACGCCCCCAGCATCCTCATCCACTTCATC
AACATGTTTCTGTTTAACTACAGTGACTCTTCCAACGC

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FIGURE 530

GCCTTTAGTTTCCAGCTACTTGGAAGGTTAAGGTAAAAGGATCCCTTTGGGCCCCGNAGGTTGA
GGCTNCAGNAGTTGAGATCNCACCATTCGATTCCATTTTGGGTGACACAAGCGAGAGCTATCT
CAAAACCAAAAAGCAAGCCAAANCCACCCAGACCAAAAAGGTGACTTCCAGGGCTGCCCCAG
CTAGGAACACTCCAGAAAGCAGACAAGGAAAACCGAGTGTGAAGAGTCCCTTTGGAGATTGTC
ATGGCCATGTGACATTCCTTTGGCCTGAACTCAGTCACATGTCCCCTTCGAGATGCAGGGGGG
ACCTGGGAAATGTAGTTTCTGGCTGGGCAGCTGCTTTCCAGCAATAGCACTCTACTGCAGAAG
AGGAGCAGGAGTCTGTGGTGCAAAGCCAGCCAGGCCTGCCACAGATACTGCACCATTTACAAA
AATGCTTTTACACTCATTTCATTTGCTTCTCATCACAAATCTATACCATCAGCTATACTGTCCT
CATTTTCA

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FIGURE 531

GAATGGAGGAAATTGCTTTCACCTTCAAGACTTTCNTTTTTTCACTAAAACCTTNTAAAGGTGTA
CAAGGGGAGGGAAGGGGGGCAAAGTCCTTGAACATTTTCTTTGGCTCGGCCATGTTATGATCA
TATACCTTTTAAATAAGGGGAAATAGTATCTTTAAAGTTAATGTCTAGCCAAGAGTTTAGTAA
ACGAAGAATTAAACTGCACTGTTGATCGGTGCTTTGTGTAAATACATCTTTAACATTTGGGTG
GAGAGGGGCCTTAAGAAGGACAGTTCATTGTAGGAAAGCAATTCTGTACATGAGTTTAAGCAT
TCTTGTTGCATTGTCTCTGCAGATTCTATTTTTGTTTACAATATTAAAATGTATGTTAGCAA
ATGGGTGGATTTTCAAATAAAATGCAGCTCCACAAAAGTTTGTATGGTATTCTGGTCTGA
GATGCATTTTCANTTTCCNTTCTCTTTTATTATCAATANTGTCATTTTCCCTAATAAAAT
ATACCCAGG

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FIGURE 532

GCTGTCCTGAGCAGTTGCAGAAGCATCGAGGGTGNAGAGGAGCACATACTGTCCATGGAGTGG
TGGTCAAGGTGGACAGGGGGCGGGTGGTGATGGCGCAGTTTGACATTGAATACCAGCGCCTAG
AGGCCTCCTATAGTGATTACCCCCAGGGGAGGAGGACCTGTTGGTGCACGTCGCCGAGGGGA
GCAAGTCACCTTGGCACCATATTGAAAACCTTGACCTCTTCTTCTCTCGAGTTTATAATCTGC
ACCAGAAGAATGGCTTCACATGTATGCTCATCGGGGAGATCTTTGAGCTCATGCAGTTCCTCT
TTGTGGTTGCCTTCACTACCTTCCTGGTCAGCTGCGTGGACTATGACATCCTATTTGCCAACA
AGATGGTGAACCACAGTCTTCACCCTACTGAACCCGTCAAGGTCACTCTGCCAGACGCCTTTT
TGCCTGCTCAAGTCTGTAGTGCCAGGATTCAGGAAAATGGCTC

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FIGURE 533

GGGTAAGTATATTTCAGTGCAGGTAAAGACTGAATGAATGGGTACCATCAAATTGGTTAAATGA
AGATGGGTTTTGGCTCAGGAACACAAAGTNTTATTTTATCCTGTGCCAAACACTCCAGTTTTG
CAATGAGATTGTGAGGAAGGAGAAGGCAAGGATTCTGTTCCAATGTTTGGTCCCAGAGGACCT
AGAATAGTACTTTGACCGGGTAAGCGCTTAATAAAATAATGCTTACTCTTATGAATTTAGCTG
CAGAAACATTTAGTCCCATAGACAATATGTGTAGAATGTAAAAAATGCAAATCTTACTAAAAG
AATATACAGGAAAAGTTCTCCCTACTCCTTCCTGAAAGGGAGCCAGTGTTATTAGCTCGTCAT
GGAGATTGTCTGTGCTCATGCAAGCATCTCCCTGCATGTATGTCCTCTTGCTTTCGTGCAAAG
AATAGCATCCTACACACACCTTTTAGCCCCCTTGCTTTTCGGTTTTGTGTATTTTGCAGATTGG
GTCATTTTGTGCACACAGTGCTATTTTATTCTTTTTTTTGTGTTGTTTCCCCCTG

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FIGURE 534

ATCATAGTGTTTTCAAAC TCCCCGTGTAAAAGTTCCCAAATCCCATGTCACAGNTGAGTCTT
GGTTTTGTTGATTGGTTTGTCTCTTGANAGTGTGTTATTTTTTGTTCATTATGTGTCTCATA
ATTTTTGGTTGAAAGCTAAAGCCTTCTTGNGAAGGCTAGTGGAGACTTGGGTAAACACTATTT
ATGNGCAAAAATGGACATGCCTTTTNTTTAAGGAGGAGGCATTGAGACAACTCTGTCAGGTTT
TGTTGTTAGTATGGTTACTCTCAAAAAGNACATAATTCAAATTCTTCCAGTATTATTTTTTTG
CTTAGTGGCTGGTTTGTGGAGAGTTTTTCTCAGTGTCTGTTCAAATCACAGTTATTGGTCTT
TTCTTTGTGCCTACGTNTAANAGAGGATATCTTTCTGTGCTTTTACCCTCACTCTTCCAGCAG
TANACTGCTGTTACTTGTTCC

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FIGURE 535

CTGCCCATTTTTTTTGCTTTTACCTGGCAAGTGTTTAAAAAAGGCCTCAAAGAAAAGGGGTTTG
TGTTGCTAGTTAAGCTAGCTTGTATTGTGGNGGCTTCCTTCGTTTTNTGCTGGCTGCCATTCT
TTACAGAAAGGGACCAACCCCTGCAGGTTNTAAGAAGACTCTTCCCGGTTGATCGTGGATTAT
TTGAGGATAAAGTAGCCAATATTTGGTGCAGCTTCAATGTCTTCTGAAGATTAAGGATATTT
TGCCACGTCACATCCAATTAATAATGAGCTTTTGTTTTACGTTTTTGAGCCTGCTTCCTGCAT
GCATAAAATTAATACTTCAGCCCTCTTCCAAAGGATTCAAATTTACACTGGTTAGCTGTGCGC
TATCATTCTTTTTATTTTCTTTCCAAGTACATGAAAAATCCATTCTCTTGGTGTCCTACCAG
TCTGCTTAGTTTTTAAGTGAAATTCCTTTTATGTCTACTTGGTTTTTACTTGTGTCAACATTTA
GTATGCT

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FIGURE 536

GGTTTGTTTCCCATCTGCCATATTATAAGTTTTTTGAGGCATCCCCAGCCATGCTGAACTGG
AAGTGGCACTAAGGTCCAAAGGAAGCTACATATGGGTGGTCCCTGTTACACCAGCCTCCCAAG
CCTCCCAGTGCACCTTCTAGGAGACAAGCAAGGAAGGCCGCTGCTTGTTTGTATCCTGCTCA
TGGCGGTGTACTGGTGCACGGAGGCCCTGCCGCTCTCAGTGACGGCGCTGCTGCCCATCGTCC
TCTTCCCCTTCATGGGCATCTTGCCCTCCAACAAGGTCTGCCCCAGTACTTCCTCGACACCA
ACTTCCTCTTCCTCAGTGGGCTGATCATGGCCAGCGCCATTGAGGAGTGGAACCTGCACCGGC
GAATCGCCCTCAAGATCCTGATGCTTGTTGGAGTCCAGCCGGCCAGGCTCATCCTGGGGATGA
TGGTGACCACCTCGTTCTTGTCCATGTGGCTGAGCAACACCGCCTCCACTGCCATGATGCTTC
CCATTGC

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FIGURE 537

TTGGCCTAATTTAAGTGATATAAAAAATGAAATTTTTTATGCAGTGTGGGNGAGGGGCAAAA
AAAATANATTTGAACACCCAGATTTTAGTTTTGGCTCTGTGNTTGCAGCTAGTTACATGGCAT
CCAGGACNAAAGTTTGAAAACAAAATAATGGAATAAATAGTACTAACCAAAGTATAGGGTG
CTTTATGATTTACAGAACTCTCTTACAGGCAGTATGTTGTTTCAGGCGCCACTAGAACCCACGT
AATGGCAGAGGCTTCCTGTTCCATGTTTAAAAACCTTTCCAAGGCTTTTCATTATTTTCTTAT
CTGTGGTACCCCTAGCTTCCTGTGCTCTAGACACACTGGCCTACCTTCAACTTCCTTGACCAG
TGTAGCTTACAGTGTAAGCTTACCCACACCCCCACCTCCTGCAATAAAATAGTAGCATCGGC

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FIGURE 538

GGTAATGGGCAATTAAAATTTTTTCGGGTCTGGATTTTAAAAATTTATATTAAGGNATTGAAG
TTCCTTTTCTCCNTTAGGTTTAACAGTGAATTCACATGAGTAATTTTAAAAGATATCAGATN
CATTTTGCTATTCAAAGAAAATTATGATTTAAAGCCACTTTTAAAATNCGAGAAGGAAAATA
GGATGGATTAAAGGGTTAACTTTTAAAGATTATTATTGGTTAATGTTGACATATTTCTCTAT
CTCATAGATGGTAAAAGTGTTGCTTTTAAAACTGGCAAATGCACTCTTCAGAAATCCTTTTC
TATCTGATCCACATGGAGAGGTAAAGGTTCAATTTTCATGACCTCTATGCAGGCAGCGCTCTC
ATTGGATGTAAGAATATTACCTGCAAGGATAGAATGCAGTTGTGCAACAGAGACACATTCTTA
TTTCACTTTTTTCACAATTTTGTTTTGTTTTTAATGACCCTTTTATTGAATATTGG

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FIGURE 539

AAAGGGTCCGGTCCCCGGCCGAAACCACTTTTGATCTTTCNTCTTTGGGCTCAAAAATGTA
CAGGTTTTCCAGGGCAGCCTTGGGATTGGGCCACTTCCTTTANGATCCTGGTTCTTCCCGTTG
TCTTNNANACGGAGAAGTTGCAAATGGAGCAACAGCAGCAATTGCAGCAGCGGCAGANACTTT
TAGGCCTAANACAGGGCTNTCAGGAGGAATGCCAGGGGCTTTACCCTCACNTCCTGGAAANAT
NTANATTGTTATTGCNGTTTGAGCTGTCTCAGTGGGATAAGTTTGAAATTCAAGNGTTTGAAC
TGNTGAAAATTGGAATTTTTTTTTTAACTTTGGCAGCAANGGGTTCG

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FIGURE 540

GGTTTGCTTTGGGGGTGTTTTTGGGAATATTTTGTGACTGCGNCNTCNTAGGGTCACTGGCATT
TTGNTTAGCTATAAATTATAAACAGATGGAACCTTACCACGCCTTGCCATTTTTTTTGCTTTTT
ACTTGGCAAGTGTTTTAAAAAAGGCCTCAAAGGAAAGGGGTTTGTGTTGCTAGTTAAGCTAGC
TTGTATTGTTGTGGCTTCCTTCGTTCTCTGCTGGCTGCCATTCTTTACAGAAAGGGAACAAAC
CCTGCAGGTTCTAAGAAGACTCTTCCCGGTTGATCGTGGATTATTTGAGGATAAAGTAGCCAA
TATTTGGTGCAGCTTCAATGTCTTTNTGAAGATTAAGGATATTTGCCACGTCACATCCAATT
AATAATGAGCTTTTGTTTTACGTTTTTGAGCCTGCTTCCTGCATGCATAAAATTAATACTTCA

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FIGURE 541

CCTTCCACTTATGTGGTCCCACACCACCCGCCTCCCCTGCCAGGNTTATTNNGTGTGTGT
GAGTGTGTTCTGTTTTGTGTTTTGTTTTTGNTGTTGTTTTCAGTTGTTTGGTTTTCTTTCT
TTCCCCCTCCGGTCCCATACTTCACAGCACTCTGGTGCGGGAAGAAGCAGAAG

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FIGURE 542

TCTAGTTTGCCTAAGTAGAATTTACATGGGAATGCACTCTATTCTGGATATTATTGNTGGATT
CCTATATAACCATTTTAATCTTAGCTGTCTTCTATCCATTTGTGGACCTGATTGACAACTTCAA
CCAAACTCACAAATATGCTCCATTCATCATCATCGGGCTTCATTTAGCTTTGGGGATCTTTTC
TTTCACTCTTGACACCTGGAGCACATCCCGAGGAGACACAGCCGAGATACTAGGAAGTGGTGC
TGGAATTGCATGTGGATCTCATGTTACTTATAACATGGGTCTAGTATTAGATCCTTCTCTAGA
TAC

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FIGURE 543

AGAACCCCCCGGTGAAGTTTTCCGCCAATAACCTAAGGGGGCTTTTTCCAGGACTTCAACCCG
AGTAAATTCCTCATCTATGCCTGTCTGCTGCTTGTTTTCTGTGCTGCTGGCCCTTCGTTTGGA
TGGCATCATA CAGTGGAGTTACTGGGCTGTCTTTGCTCCAATATGGCTGTGGAAGTTAATGGT
CATTGTTGGAGCCTCAGTTGGA ACTGGAGTCTGGGCACGAAATCCTCAATATCGAGCAGAAGG
AGAAACGTGTGTGGAGTTTAAAGCCATGTTGATTGCAGTGGGCATCCACTTGCTCTTGTTGAT
GTTTGAAGTTCTGGTCTGTGACAGAATCGAGAGAGGAAGCCATTTCTGGCTCCTGGTCTTCAT
GCCGCTGTTCTTTGTTTC

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FIGURE 544

TTAATGTCTAAGCCAAGAGTTTAGTAAACAAAGAATTAAACTGCACTGTTGATCGGTGCTTTG
TGTAATACATCTTTAACATTTGGGTGGAGAGGGGCCTTAAGAAGGACAGTTCATTGTAGGAA
AGCAATTCTGTACATGAGTTTAAGCATTCTTGTTGCATTGTCTCTGCAGATTCTATTTTGT
TACAATATTAAAATGTATGTTAGCAAAATGGGTGGATTTTCAAATAAAATGCAGCTTCCACAA
AAGTTTGTATGGTATTCTGGTCTGAGATGCATTTTCATTTTTCCTTTCTCTTTTATTATC
AATATTGTCATTTTCCCTAATAAAATATACCCAGG

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FIGURE 545

AGTTTCATATATTTGGGAATGAGCCTTGAGCCATAAAAGGTTTTTCAGCAAGTTGTAAC TTATT
TTGGCCTAAAAATGAGGTTTTTTTGGAAAGAAAAAATATTTGTTCTTATGTATTGAAGAAGTG
ACTTTTATATAATGATTTTTTTAAATGCCCAAAGGACTAGTTTGAAAGCTTCTTTTAAAAAGAA
TTCCTCTAATATGACTTTATGTGAGAAGGGATAATACATGATCAAATAAACTCAGTTTTTTAT
GGTTACTGTAAAAAAGACTGTGTAAGGCAGCTCAGCACCATGCTTNTCGTAAAAGCAGCTTCA
ATTATCCNCTGGGGTTATCTTTTGACAACTTGCCATTATCTGATGTTACACAATTCAATAGCA
AGCAAGTTTGAGACAATCGC

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FIGURE 546

CATAAATATACCCACCCCAAATGGACGACTTATGAAGGAATTNCTTGTGAAAGCTCATTGGAG
TAAAATTTCTCTCAAACAATACTTTTAGGTCATANGCNTGAGTCTATTAATTATTTTTCTGT
TANACCCTGCCAAAAAAGAATTTTAAAAGTTAGTTTATGTTTTGTGTAACCATGTTCTTCAGA
ATGCAGGTATGTGAGCATCATGGTTTCTGGGTAATTCTGCTGCTCCTGTCTTTGAAAATGGAG
ATACCACTTGCAGCTTATCCCACTGCTGAGTATTCCAGCATTGGTAGTGGTTTCACTCCATTG
CATCCATCCAGAACTTTCACACAGGCCTCCCCGAACCCCTTGCGGCGCAAGGGGTTCTG

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FIGURE 547

AAAAAAAAAAAAATTAAGTGAACCTCTACTTTAGAATGTTGGCTTTTCATATATGTACAAAACA
AAAGAGGTTGCAGTGATGGCGTGGATAAAGGCACCTGTGTACTTTTCCAACCTATCCAATTTC
AAGATGTATCCTTTGTGGATTACATTGGTTCTTTTCTATGGAATCATGCACCTTAGACCTGGG
AGAAACCAGCGTGACATCCAGGGTCAAGGTTTTCCAATCAGGTATTTGGGCAAGGGGTTTCG

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FIGURE 548

AAAAAAAAAAAAAAAAAGCTAAAAACCCTTGACTAAATCTCCCATGTTTTCTCATATTATTA
AAAATTCTAAACGNGGGTTTTTTTGTGTTTGTGTTTGTGTTTCTGTTTCTCCCTCTGCAGAGTTG
TTAGCGGTTCTCGAGATGCCACTCTTAGGGTTTGGGATATTGAGACAGGCCAGTGTTTACATG
TTTTGATGGGTCATGTTGCAGCAGTCCGCTGTGTTCAATATGATGGCAGGAGGGTTGTTAGTG
GAGCATATGATTTTATGGTAAAGGTGTGGGATCCAGAGACTGAAACCTGTCTACACACGTTGC
AGGGGCATGCGGCCGC

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FIGURE 549

AAATTATCTTTACTGATATGCGTTGCCAAATCCCATGAGAAAAGACATCTCATTGAGGTTCC
CCTTCCTCTCATGTGGTTGATTTTTTGGGAAGGTGATACAGATGTGGGTAACCATGCAAATGTT
TATGAATAACTTTACTGAAGTGATTCCATCCGTATTCTGTTCTAATACTGGAGAATGACCTT
CATATTTATATATTTTATTTCTTTGTTTCAACTATCCAG

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FIGURE 550

TGAAGATATGGGAGACCTATNCTTAGATGTTGCTGAAGCTTTTCTGATGTTGGGAATATAATT
CTGCACTTCCCCTCCTCAGGGCTCTTGTTTGCTCTGAAAGATACAACCTTGCAGTAGTTTTGG
CTTCGTCATGCAGAAATGTTTAAAGGCCTTAGGCTATATGGAGCGAGCTGCTGAAAGCTATGGC
AAGGTGGTTGATCTGGCCCCACTCCATTTGGATGCAAGGATTTCACTTTCTACCCTTCAGCAG
CAGCTGGGCCAGCCTGAGAAAGCTCTGGAAGCTCTGGAACCAATGTATGATCCAGATACTTTA
GCACAGGATGCAAATGCTGCACAGCAGGAAGTGAAGTTATTGCTTCATCGTTCTACTCTGTTG
TTTTCACAAGGCAAAATGTATGGTTATGTGGATACCTTACTTACTATGTTAGCCATGCTTTTA
AAGGTAGCAATGAATCGAGC

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FIGURE 551

TGGACCCCAGTTGTCAGCTGGGNGGTACTGGATCATCTTTNTTCTATCACAAGATAAACTATC
AANTTCCCCAGCATCATGACCTTGTTGCCGTAAAAAGGAGTTCCTACTTCTGTTCACTTTGA
GTCTCTTCAAATGGATTCTGTGTCCTCCTCTGGAGTCTGTGCTGCATTTATTGCTTCTGACTC
TTCCACTAAGCCAGAG

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FIGURE 552

CTAAAGGGGAAGAAGAAAAAGAAAGGATTGGTCTTGCTNTAAGGGGTAGAAAAGNGCAAGGGG
AANCAGGAAAGGAAGGCNCCCTACGGNGTAATTATGAAAATGCATTGGAACTTCTGTCTGATG
TTTTGCTTTTTTTTTTCATTTCTCAAAATATTTCTANANANGGTNTAATCCTTCTTCCACCAT
TTGCTTTAGTTTTTAAGNGCCCTGTGTGATAGAAGGGTTCATGTTGTAAAATCAGTNTTGAATA
ATCAGAACACTTCTACCAGATTGTCTAATGTTGATTTGTTTCTGGCACTGCTTCTAAATGTCT
TCCTCCTCATTCTGCG

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FIGURE 553

TAAAAGAAAAGCTAAAGTTTTACTGTGGCCAAAAAACCCTACATGGTCTGGGGACTGGNGGT
NTCTTTGACCNTATCTTTGACCACTTTTCTTTTTTCANTTTTCTCAAGGCACANCTGGCCTCC
TTTTTGTTCCCTGGCANTGGGAAGACTTGTTCCCTACTTCAGGGTCTTCATGTTTGTTCCTCCNT
CTGCCTTGAACACCCACCTTTCTCCCAAGTGTTCCAGGCAGATGGAGTATGCACATGGCTCAC
TCTTTTACTTTTTTAAGTCTCTGCTCAAAGCAAATTTNTCAGCCATGGCTTTCCTGAGCACCC
TATTTAAAATTGCTTTCCTACTCCTACATGGCTGTTCTCCTTTGCTTACCACCAC

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FIGURE 554

TTAAAATAGTAAAAAAAAAAGAATTTATTTTTGTTCTTTGTTAGAATTTCTCTGCAAAGAATG
TCCAAAATTCATATTCACATTGATCGTATGGCAAAAAGATGTCCCAGAAGAACAAGAACATA
TGAGAAGATGGCTGCATGAACGTTTCGAAATCAAAGATAAGATGCTTATAGAATTTTATGAGT
CACCAGATCCAGAAAGAAGAAAAAGATTCCTGGGAAAAGTGTTAATTCCAAATTAAGTATCA
AGAAGACTTTACCATCAATGTTGATCTTAAGTGGTTTGACTGCAGGCATGCTTATGAC

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FIGURE 555

CCTTATTTTCCATTCCAAATGGCAGCCAGNATAAAATTNATTTCCCACAATTTCCCTTTAANG
GTAAGGGTTGCCCTTNCCGCAATGCCCCTCACATGGTTCTTTTGGNCAGTTCGGAAGCCCTTG
GGNTCTTGATGGCTTTGTGTCTAGTAATAATGCAGGGTGCTCAAGGAAATAAATTCAGTGTGG
ATATACTGAAAAC

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FIGURE 556

GGTCCGGAATAAGCCATTAGCAATCCTTGCTGTATCCAGGCCTTATTTTTTATAGACTATGGA
CATTTTCAATATAATTCTGTGAGTCTTGGCTTTGCTTTGTGGGGTGTTCTTGGAATATCTTGT
GACTGCGACCTCCTAGGGTCACTGGCATTTTGNTTAGCTATAAATTATAAACAGATGGAACCT
TACCACGCCTTGCCATTTTTTTTGCTTTTTACTTGGCAAGTGTTTTAAAAAAGGCCTCAAAGGA
AAGGGGTTTGTGTTGCTAGTTAAGCTAGCTTGTATTGTTGTGGCTTCCTTCGTTCTCTGCTGG
CTGCCATTCTTTACAGAAAGGGAACAAACCCTGCAGGTTCTAAGAAGACTCTTCCCGGTTGAT
CGTGGATTATTTGAGGATAAAGTAGCCAATATTTGGTGCAGCTTCAATGTCTTTTGAAGATT
AAGGATATTTTGCCACGTCACATCCAATTAATAATGAGCTTTTGTTTTACGTTTTTGAGCCTG
CTTCCTGCATGCATAAAATTAATACTTCAGCC

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FIGURE 557

AAATCTTCTTGAGCTTTGTTTTGAGATGTAGTTGAGTTAACTTATAAACCGTTTCATTCTTTT
GGGTNTTGTTTTTATGATTTATTAGACAGATATGAAGGAGTGCTTAGTCCAGGANTAATTATT
CCTCACCACTGAGGCAAGACTTTCTGTGGACTCTGTTGAATGTTCCATGAATTAATAGTTTTT
CCAGTTTGGCTAGTGGGAACAGATACTATTCCTGGCTTTGTATGAGTATCAGGCCCTGTTCCC
TCCCATTTGTTTCTGATGTTCTTTTTCTGGATTCTCATAGTTTCCTCATATGCATATGCTGATC
AGTTATCTGGTGAATGCTTGAGAGAAGATCTCTATAGACCTCTGGGGTTCTTTTCTATGCAAC
TGTCTCCTCTCAGCATTCTGTGCAGTTATTCCTTGCTGCTTTTTTCTCTCCTGGCTCTTAACT
TTCTCTTTCCAACCTCAGGAGTCAGCTGAGATTTGCCTCAGTTGCCAC

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FIGURE 558

TTGCCCTTGGGAGTAAACCTTGAATNATTTTAAAAAACNACGGTTTTAAACCTTGGCNACCG
TTGGGTTGAGGCCTTGACCACCTTTGGGACACCN TGCAAGAGGANTCCAACCCNAAACAACAA
CCAGGATGTGCTCCNAGCCCAGCCCGGGGNTTCAGTNCCATANTTTGCCATGTGTCTGTCCAG
ATNTGGGGTTGAGCGGGGGGTGGGGNTGCAACCCAGTGGATTGGGTCACCCGGCAGACTTAGG
GAAGGTGAGGCGANGTGGGGAGTTGGCAGAATCCCCATACCTCGCAGATTTGCTGAGTCTGTC
TTGTGCAGAGGGCCAGAGAATGGCTTATGGGGGCCAGGTTGGATGGGGAAAGGCTAATGGGG
TCAGACCCCAACCCGTCTACCCCTCCAGTCAGCCCAGCGCCCATCCTGCAGCTCAGCTGGGAG
CATCATTCTCCTGCTTTGTACATAGGGTGTGGTCCCCTGGNANGTGGCCACCATCATGTCTAG
GCCTATGCTAGGAGGCAAATGGCCAGGCTCTGCCTGTGTTTTTCTCAACACTANTTTTCTGAT
ATGAGGGCAGCACCTGCCTCTGAATGGGAAATCATGCAACTACTCAGAATGTGTCTCCTCAT
CTAATGCTCATCTGTTTAATGGTGATGCCTCGCGTACAGGATCTGGTTACCTGTGCAGTTGTG
AATACCCAGAGGTTGGGCAGATCAGTGTCTCTAGT

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FIGURE 559

ATCCGGCTGGGATACAATTTTCATCTTCCATTTNACTCTTGTCAATTCCACCTTTTAAGAAGA
CAGCNTNTCATTCCCTGAGGCATGAAAATTCTCCAGGGACAAAGCCATGCNTCAGTNACATGTG
TGTGCAGAGAGAAATGCACCTGTNTATCTAAGGGTAGATTTTTGATCCCTGAATAATTCATTG
ACTAAACTGACCTCTTCCTCCTGGCTAAATAAATTAATTTTGCTGGCTTCTCTCTCAGCGGTT
TCTATTTTGTAAATTGCTGCATGACCAAAATAGCCCCANTCAAATCAATTGGATTAATNTTA
ATGGTTTGGTTGGATGAATATTCTTGGATGAATATAAAATGTGCTGCCCTTCACAGATGACAC
CACTCCCCTGTCAATCATAGCACATGTGTACTTTTTATTGTTACTTAATAGTGATGGATTTGC
ACTTTTCTATCCTCATACTCTTTCCTGTTTTCTTCTTTGTACAATTGCATGCAGGAGGGCTGG
ATGCCAGGGTTAAGAGAGAAATTCATGACAAGGAAGGTAAAATTGGTTCAAATGAGCATGTGT
CCCACAGCCTTAGTCTCCC

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FIGURE 560

CCGGGAAATTAAGCCCTTTTTTTTTTTTCAAATAATAAAAGCTTCGAAATTGAAAGGGAGAAG
TAAATATNCCGGATACCATGATTTAATATGTAGAAATTNTAAGAGATTCNCAAACCATTAAG
ATAAAAGCCAGTTCACCAAAGTNAAGGATGNAAGATCAGTGTACATAAATCTGTTTTATTTCC
ATATACTTGCAAAGAGGAATCCCAAACCTGAGATTGAGGAAAGCATATATAATAGCATCAAAA
AGTAGTACAAAACATATACTCTGAAAACCTGCAGAATGTTGAGAGAAATTAAATAAGTAAATAG
ATAATCCCATGTTTCATCTAGCCAGAGGACTCATGTATTTTGGTTATTAACCCCTGATCAGATG
TATGGTTTGCAAATATTTTCTCCCATTTCATACATTGGCTCTTCATTCTGTTGATTGTTCTCT
TCCTGTACAGAAGTTTTTAAGTTTCATATATAATTTTAGTGGTCTATTTTGCCTTCGTTCCC
TATGCTGTCGGGGTCATATCTAAAAAGGTCATCGTGCAGACCAACGTCATGGAGATTTTCCC
TGTGTTTCCAGTAGTTTTACAGTTTTGGGTCTTACATATAAGTTTGTTTTCTTTTTTTCGAGA
TGGAATCTTGCTCTGCGG

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FIGURE 561

AAAAAAAAAAAAAAAAAGGGCGGCCGCGACTCTAGAGTCGACCTGCAGGGTTTTTATCCAAAAT
GAAATGGTTGGGCACCAAAGAGACAGAAACCCACAAGTCAACCACTTAGGTCACACATGGTTC
TGAAAGTCCTATACTGTTCTGGATTCCCAGGCACAGAACTCCGGGCTGCTCAGGAAGAGACTA
TGATTCTTCCACCTGCCAGCTACTATTGGCCATCCCTTCTCATTGCTTCTAGCTCCAGCCTTC
TCATCCCAATTCTCTATTCTACATTGTTATTTCTAACCCATTGTGTGCTGGGAAATCAAACCA
CTCAGCA

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FIGURE 562

CCCACGCGTCCGNTGGTGGCTTCAGAAGAAATTCTCAACACCTAGCTCGCCAGAGAGTCTATG
TATGGGATTGAACAATCTGTAACTAAAGGATCCTAATCATGAAAATAAGTATGATAAAATTAT
AAGTCACTATTGGCACTGTTGTTTATATTAGCCTCCTGGATCATTTTTACAGTTTTCCAGAAC
TCCACAAAGGTTTGGTNTGCTCTAAACTTATCCATCTCCCTCCATTANTGGAACAACTCCACA
AAGTCCTTATTCCCTAAAACACC

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MS49, 1 DNA Way, South San Francisco, CA 94080-4990
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- (71) Applicant (for all designated States except US): **GENEN-
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- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BAKER, Kevin,**
P. [GB/US]; 14006 Indian Run Drive, Darnestown, MD
20878 (US). **GODDARD, Audrey** [CA/US]; 110 Congo
Street, San Francisco, CA 94131 (US). **WOOD, William,**
I. [US/US]; 35 Southdown Court, Hillsborough, CA 94010
(US).
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(54) Title: NOVEL POLYNUCLEOTIDES AND METHOD FOR THE USE THEREOF

(57) Abstract: The present invention is directed to novel polynucleotides and to polypeptides encoded thereby. Also provided herein are vectors and host cells comprising those nucleic acid sequences, chimeric polypeptide molecules comprising the polypeptides of the present invention fused to heterologous polypeptide sequences, antibodies which bind to the polypeptides of the present invention and to methods for producing the polypeptides of the present invention.

INTERNATIONAL SEARCH REPORT

Inter-
national Application No
PCT/US 00/20006

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N15/12 C07K14/47 C12N1/21 C12N1/15 G01N33/68 C07K16/18		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07K C12N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, BIOSIS, MEDLINE, STRAND		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMHUM1 [Online] EMBL Heidelberg, Germany; AC/ID AC007052, 15 March 1999 (1999-03-15) BIRREN B ET AL.: "Homo sapiens chromosome 18, clone hRPK.411_H_24" XP002152824 see nucleotides 60050-61000 abstract ---	1-24
A	WO 97 07198 A (GENETICS INST) 27 February 1997 (1997-02-27) the whole document ---	
A	EP 0 834 563 A (SMITHKLINE BEECHAM CORP) 8 April 1998 (1998-04-08) the whole document --- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search 15 November 2000		Date of mailing of the international search report 19. 02. 01
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Oderwald, H

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/20006

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 (1996-07-16) the whole document	
P,X	<p>---</p> <p>DATABASE EMHTG23 [Online] EMBL Heidelberg, Germany; AC/ID AP001569, 31 March 2000 (2000-03-31) HATTORI M ET AL.: "Homo sapiens 177,097 genomic DNA of 18q21" XP002152825 see nucleotides 21800-22350 abstract</p> <p>-----</p>	1-24

INTERNATIONAL SEARCH REPORT

Ir. International application No.
PCT/US 00/20006

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Invention 1. : claims 1-31 partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-31 partially

An isolated nucleic acid molecule as in SEQ ID NO: 1. A method of detecting the presence of a cDNA molecule which encodes a mammalian polypeptide, a vector and a host comprising said nucleic acid. A polypeptide encoded by said nucleic acid, an antibody which binds to said polypeptide.

Invention 2-562: claims 1-31 partially

same as invention 1 but comprising SEQ ID NO: 2-562 (wherein invention 2 comprises SEQ ID NO: 2, invention 3 comprises SEQ ID NO: 3, ... and invention 562 comprises SEQ ID NO: 562)

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter. Patent Application No

PCT/US 00/20006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			AU 727480 B	14-12-2000
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